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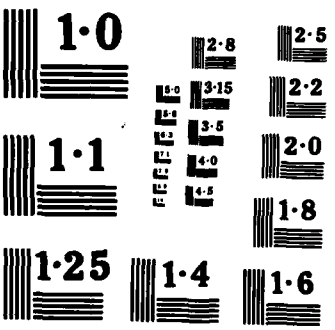
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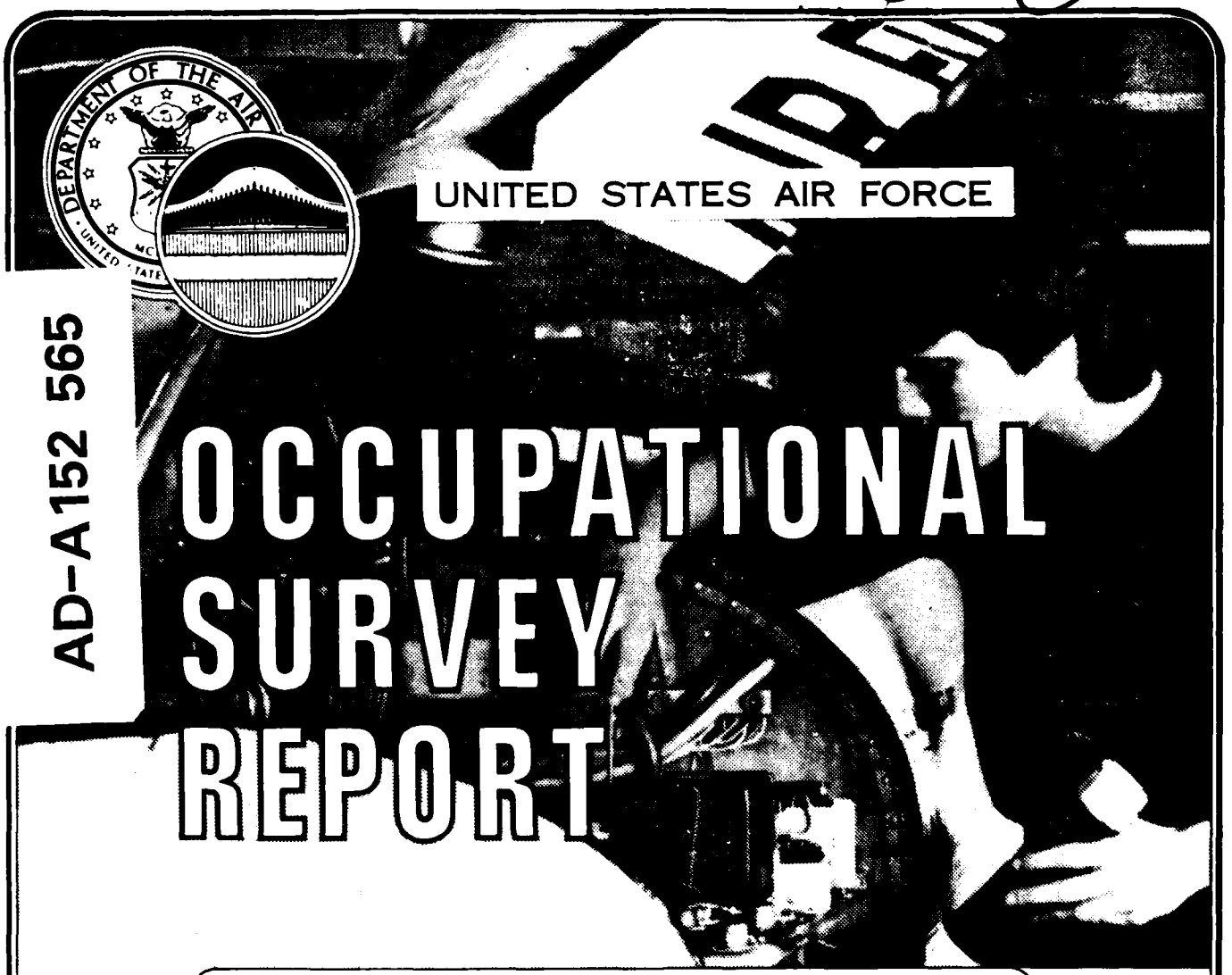

OCCUPATIONAL SURVEY REPORT

AIRCRAFT ELECTRICAL SYSTEMS CAREER LADDER
AFSC 423X0

AFPT 90-423-501

FEBRUARY 1985

OCCUPATIONAL ANALYSIS PROGRAM
USAF OCCUPATIONAL MEASUREMENT CENTER
AIR TRAINING COMMAND
RANDOLPH AFB, TEXAS 78150

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3785 FLDTG/TTFO	2		2	

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PREFACE

This report presents the results of an Air Force occupational survey of the Aircraft Electrical Systems career ladder (AFSC 423X0). Authority for conducting occupational surveys is contained in AFR 35-2. Computer printouts from which this report was produced are available for use by operations and training officials upon request.

The survey instrument was developed by First Lieutenant William A. Carney, Inventory Development Specialist. Second Lieutenant David L. Hardy, Occupational Analyst, analyzed the data and wrote the final report. Ms Becky Hernandez provided computer programming support for the project. This report has been reviewed and approved by Major Charles D. Gorman, Chief, Airman Career Ladders Analysis Section, Occupational Analysis Branch, USAF Occupational Measurement Center.

Copies of this report are distributed to Air Staff sections, major commands, and other interested training and management personnel. Additional copies may be obtained upon request to the USAF Occupational Measurement Center, Attention: Chief, Occupational Analysis Branch (OMY), Randolph AFB, Texas 78150-5000.

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SUMMARY OF RESULTS

1. Survey Coverage: A total of 1,814 members of the 423X0 career ladder were surveyed to obtain current data for use in training and management decisions. All major commands with assigned aircraft were represented.

2. Specialty Jobs: Most of the aircraft electrical personnel were part of the following job groupings: technical maintenance functions (flightline, troubleshooting, battery shop, in-shop, etc.) , or supervisory and management functions (line, branch, or specialist flightline supervisors, quality control, training, or maintenance scheduling). There are a few small independent job types that are identifiable by either a specific aircraft or a unique technical responsibility. Overall, the career field is relatively consistent in the tasks members spend the most time performing.

3. Career Ladder Progression: The 423X0 career ladder follows a typical pattern of career progression through skill levels. Three- and 5-skill level personnel are performing mostly technical tasks, while 7-skill level personnel perform technical tasks as well as supervisory and management duties.

4. AFR 39-1 Specialty Descriptions: The 3-, 5- and 7-skill level descriptions accurately reflect the jobs performed by career ladder personnel.

5. Training Analysis: The STS appears to have been matched well to the tasks of the inventory. The POI has several tasks that should be considered for inclusion in the basic course. Both documents need to be reviewed because of their general nature and also should be compared to the FTD courses of instruction. In the end, the personnel of the 423X0 career ladder seem to get the proper training; however, documentation of required training should be improved.

6. Comparison to Previous Survey: This occupational analysis presents a more detailed look at the career ladder structure than the 1979 report. As a whole, the career field appears stable.

7. Implications: Analysis indicates that a core of common training, followed by system-specific training, would be the most effective and efficient means of providing training. Training documentation should be improved to aid training personnel in making such decisions.

OCCUPATIONAL SURVEY REPORT
AIRCRAFT ELECTRICAL SYSTEMS CAREER LADDER
(AFSC 423X0)

INTRODUCTION

This is a report of an occupational survey of the Aircraft Electrical Systems career ladder (AFSC 423X0) completed by the Occupational Analysis Branch, USAF Occupational Measurement Center, in February 1985. This specialty was last surveyed in 1978. The present survey was requested by HQ USAF/LEYM.

Background

AFSC 423X0 was created in 1951 as the Senior Aircraft Propeller Mechanic career field. In 1954, the career field was established as the Aircraft Electrical Career Ladder. Between 1959 and 1961, the career field became Aircraft and Missile Electrical Repairman career field. Between 1961 and 1976, members were known as Aircraft Electrical Repairman. In 1976, the 423X0 AFS stabilized as the Aircraft Electrical Systems career field.

As described in AFR 39-1 Specialty Description, Aircraft Electrical Systems personnel are responsible for troubleshooting, inspecting, repairing, modifying, and overhauling aircraft electrical systems. Also, they maintain the associated electrical components, subsystems, and test equipment, as well as maintaining inspection and maintenance records.

Primary entry into the career ladder is from Basic Military Training School (BMTS) through a Category A, 15-week, formal training course (C3ABR42330 000) conducted at Chanute AFB, Illinois. The course includes topics such as DC Principles, AC Electronics, Aircraft Control and Warning Systems, and Aircraft Inspection and Maintenance. After completion of the ABR Course, most airmen are sent to a specific assignment where they receive FTD training on specific aircraft systems and begin hands-on work and OJT programs.

SURVEY METHODOLOGY

Inventory Development

The data collection for this occupational survey was accomplished by using USAF Job Inventory AFPT 90-423-501, dated November 1983. A tentative task list was prepared after reviewing current career ladder publications, tasks from previous job inventories, and data from the previous occupational survey report (OSR). The tentative task list was then evaluated through personal interviews with 34 subject-matter specialists from 7 bases. The resulting job inventory contained a comprehensive listing of 554 tasks grouped under 12 headings. A background section contained questions regarding grade, duty title, total time in service, total time in career field, time in present job, total active federal military service, job satisfaction, and test equipment used.

Survey Administration

Consolidated Base Personnel Offices (CBPO) in operational units worldwide administered the inventory to personnel holding AFSC 423X0. These individuals were selected from a computer-generated mailing list obtained from personnel data tapes maintained by the Air Force Human Resources Laboratory (AFHRL).

Each individual completed the survey in three steps:

1. Completion of the Background Information Section;

2. Identification of each task performed in their current job; and

3. A rating of each task performed on a 9-point scale, showing the relative amount of time spent on that task in comparison to the other tasks performed.

The ratings ranged from one (very small amount of time spent) through five (above average time spent) to nine (very large amount of time spent).

Survey Sample

Personnel were selected to participate in this survey to ensure an accurate representation across major commands (MAJCOM) and paygrade groups--2,151 eligible 3-, 5-, and 7-skill level AFSC 423X0 personnel were mailed inventory booklets. Table 1 shows the percentage distribution by MAJCOM of the assigned personnel in the career field, as of March 1984. Also listed by MAJCOM is the percent distribution of respondents used in the final sample. The 1,814 personnel included in the final sample represent 50 percent of the personnel assigned to the 423X0 career field. Table 2 reflects the paygrade distribution, while Table 3 lists the sample distribution by TAFMS.

TABLE 1

COMMAND REPRESENTATION OF SURVEY SAMPLE

COMMAND	PERCENT OF ASSIGNED	PERCENT OF SAMPLE
TAC	32	30
MAC	21	22
SAC	18	20
USAFE	11	11
ATC	7	7
PACAF	5	4
AFLC	2	2
AFSC	2	3
AAC	1	1

Total Assigned* = 3,643
Total Eligible for Survey** = 2,151
Total in Sample = 1,814
Percent of Assigned in Sample = 50%
Percent of Eligible in Sample = 84%

* Assigned strength as of March 1984
** Personnel retiring, PCS, or separating are not eligible

NOTE: Columns may not equal 100 percent due to rounding

TABLE 2

PAYGRADE REPRESENTATION OF SURVEY SAMPLE

PAYGRADE	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE
E-1, E-3	36	35
E-4	25	24
E-5	23	24
E-6	11	11
E-7	5	6

* As of March 1984

TABLE 3

TAFMS DISTRIBUTION OF SURVEY SAMPLE

	MONTHS IN SERVICE					
	1-48	49-96	97-144	145-192	193-240	241+
NUMBER IN AFS 423X0 SAMPLE	821	503	193	168	93	36
PERCENT IN AFS 423X0 SAMPLE	45%	28%	11%	9%	5%	2%
PERCENT OF AFS 423X0 ASSIGNED*	57%	19%	9%	8%	6%	1%

* As of March 1984

TABLE 4

COMMAND DISTRIBUTION OF TASK DIFFICULTY AND TRAINING EMPHASIS RATERS

COMMAND	PERCENT OF ASSIGNED	PERCENT OF TASK DIFFICULTY RATERS	PERCENT OF TRAINING EMPHASIS RATERS
TAC	32	20	25
MAC	21	22	18
SAC	18	22	23
USAFE	11	13	16
ATC	7	13	4
PACAF	5	4	-
AFLC	2	2	4
AFSC	2	5	6
AAC	1	-	4

NOTE: Columns may not equal 100 percent due to rounding

Data Processing and Analysis

Once job inventories are returned from the CBPOs, the background information and task responses are checked for proper completion. The data are then entered into the computer. A series of related computer programs, called the Comprehensive Occupational Data Analysis Programs (CODAP), is then applied to the data to aid in analysis. The resulting CODAP computer products identify groups of survey respondents based on percent members performing and percent time spent on tasks.

Task Factor Administration

In addition to completing a job inventory, selected senior 423X0 personnel were asked to complete a second booklet for either training emphasis (TE) or task difficulty (TD). The TE and TD booklets are processed separately from the job inventories. Rating information is discussed in several detailed sections of this report. Table 4 shows the sample representation across MAJCOMs for TE and TD raters. The reliability among raters indicates that any other variations in MAJCOM representation have an insignificant impact on the data.

Task Difficulty. Each person completing a task difficulty booklet was asked to rate all inventory tasks on a 9-point scale (from extremely low to extremely high) as to the relative difficulty of those tasks. Difficulty is defined as the length of time required by an average individual to learn to do a particular task. Task difficulty data were independently collected from senior personnel in the 423X0 career ladder stationed worldwide. Interrater reliability (as assessed through components of variance of standard group means) was .94, which indicates a high degree of agreement among the 55 raters as to which tasks are high in task difficulty and which are low. Ratings were adjusted so tasks of average difficulty have ratings of 5.00 and a standard deviation of 1.00. The resulting data essentially provides a rank ordering of tasks indicating the degree of difficulty for each task in the inventory.

Strength and Stamina Requirements. These senior personnel were also asked to indicate the tasks that any of the 423X0 personnel they supervise have experienced difficulty performing because of excessive physical strength or stamina requirements inherent in the task. There were no significant responses to problems with strength and stamina from this survey question.

Job Difficulty Index (JDI). After the data obtained from the raters on task difficulty is processed, it is possible to compute a JDI for the job groups identified in the survey analysis. An equation using the number of tasks performed and the average difficulty per unit time spent (ADPUTS) is the basis for calculating the JDI. In this equation, the more time a group spends on difficult tasks, or the more tasks they perform, the higher the JDI. The index ranges from 1.0 for extremely easy jobs to 25.0 for extremely difficult jobs. The indices are adjusted so the average JDI is 13.0. This index provides a relative measure of which jobs in the specialty are more or less difficult when compared to each other. The index helps identify possible utilization problems or causes of job dissatisfaction.

Training Emphasis (TE). Another group of senior technicians were selected to complete training emphasis booklets by rating tasks on a 10-point scale (from no (0) training required to extremely high (9) training required). TE is a rating that essentially rank orders the tasks listed according to relative amount of emphasis that sould be placed on each task when training first-term personnel. When used in conjunction wth other factors, such as percent members performing and task difficulty ratings, TE data can provide insight into the leve at which structured training for a particular task should be provided. Structured training is defined as training provided at resident technical schools, field training detachments (FTD), mobile training teams (MTT), formal OJT, or any other organized training program. The interrater reliabilty (as assessed through components of variance of standard group means) for the 49 raters of training emphasis was .94, indicating a very high level of agreement among raters concerning training requirements. In this specialty, the average TE rating was 2.63, and the standard deviation was 1.61. Tasks with a TE rating of 4.24 or higher are considered high in training emphasis.

SPECIALTY JOBS
(CAREER LADDER STRUCTURE)

An important part of the USAF Occupational Analysis Program is the identification of the functional structure within the career ladder. The tasks performed by career ladder personnel are examined and job groups are formed based on task similarity. The structure is then compared to the organization defined by official career ladder documents. This analysis of actual jobs performed is made possible by the use of the Comprehensive Occupational Data Analysis Program (CODAP). Job information is then used to examine the accuracy and completeness of career ladder documents (AFR 39-1 Specialty Descriptions and Specialty Training Standards) and to formulate an understanding of current utilization patterns.

Each individual in the survey sample performs a set of tasks called a job. A group of individuals who perform similar tasks, and spend similar amounts of time performing those tasks, is called a job type. Personnel who are performing similar tasks but fail into several job types that differ in minor ways form a subcluster. Job types and subclusters having a substantial degree of similarity are grouped together and called a cluster. Those specialized job types too dissimilar to fit within a cluster are labeled independent job types.

Overview of Specialty Jobs

A thorough analysis of the survey data identified 10 clusters, 12 subclusters, 26 job types, and 6 independent job types. The division of jobs performed by 423X0 personnel is based on task similarity and relative amount of time spent and is illustrated in Figure 1. These clusters, subclusters, job types, and independent job types are listed below. The group (GRP) number shown beside each title is a reference to computer-printed information; the number of personnel in the group (N) is also shown. The number of personnel in subclusters and job types included in each cluster does not always equal the number of personnel shown for that cluster. The jobs of those not included are adequately described by the cluster description.

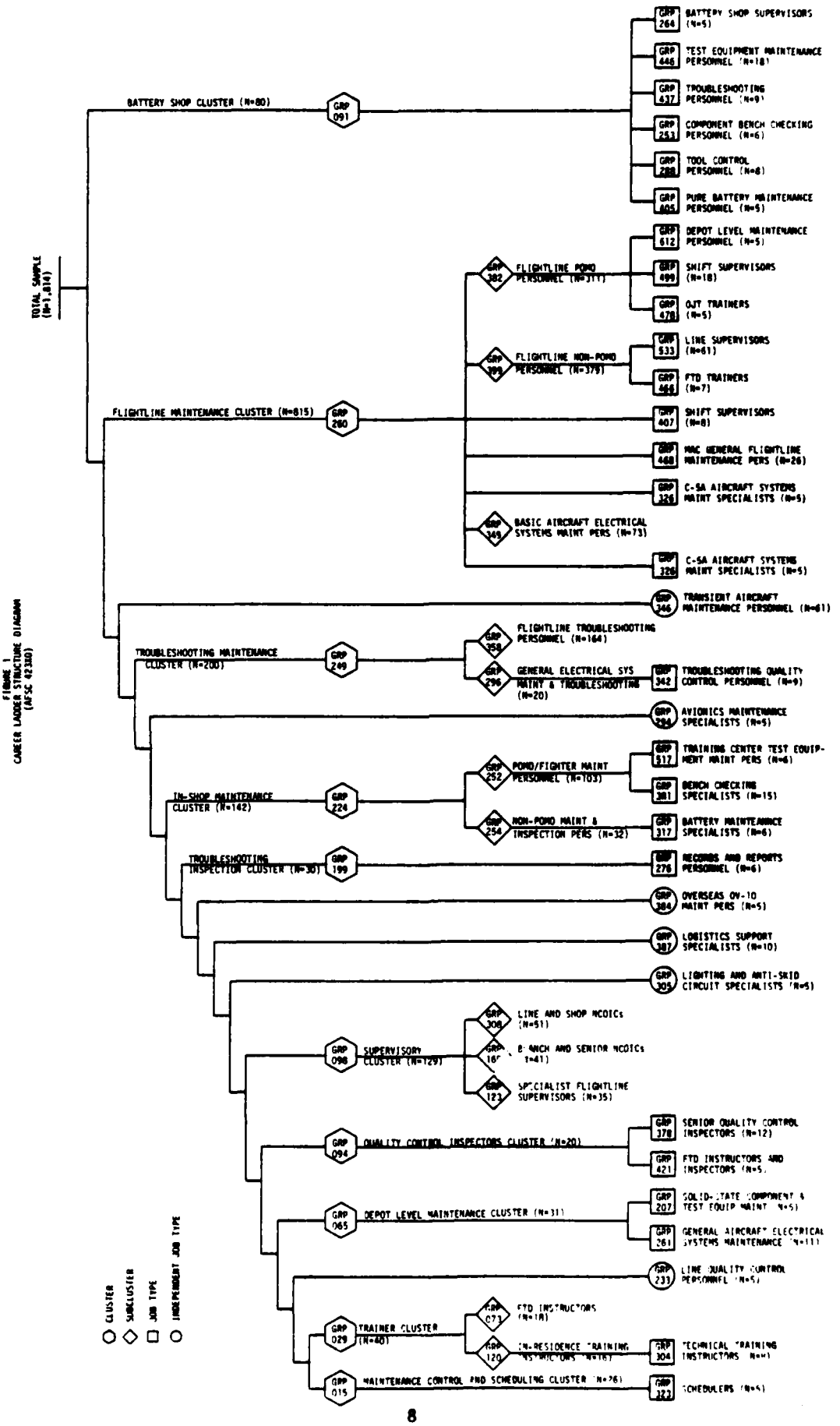


FIGURE 1
CAREER LADDER STRUCTURE DIAGRAM
(AFSC 42330)
TOTAL SAMPLE
(N=1,814)
BATTERY SHOP CLUSTER (N=80)
GRP 091
GRP 264 BATTERY SHOP SUPERVISORS (N=5)
GRP 446 TEST EQUIPMENT MAINTENANCE PERSONNEL (N=18)
GRP 437 TROUBLESHOOTING PERSONNEL (N=9)
GRP 253 COMPONENT BENCH CHECKING PERSONNEL (N=6)
GRP 288 TOOL CONTROL PERSONNEL (N=8)
GRP 405 PURE BATTERY MAINTENANCE PERSONNEL (N=5)
FLIGHTLINE MAINTENANCE CLUSTER (N=815)
GRP 260
GRP 382 FLIGHTLINE POMO PERSONNEL (N=311)
GRP 612 DEPOT LEVEL MAINTENANCE PERSONNEL (N=5)
GRP 499 SHIFT SUPERVISORS (N=18)
GRP 478 OJT TRAINERS (N=5)
GRP 398 FLIGHTLINE NON-POMO PERSONNEL (N=378)
GRP 533 LINE SUPERVISORS (N=61)
GRP 466 FTD TRAINERS (N=7)
GRP 407 SHIFT SUPERVISORS (N=8)
GRP 468 MAC GENERAL FLIGHTLINE MAINTENANCE PERS (N=26)
GRP 326 C-5A AIRCRAFT SYSTEMS MAINT SPECIALISTS (N=5)
GRP 348 BASIC AIRCRAFT ELECTRICAL SYSTEMS MAINT PERS (N=73)
GRP 326 C-5A AIRCRAFT SYSTEMS MAINT SPECIALISTS (N=5)
GRP 346 TRANSIENT AIRCRAFT MAINTENANCE PERSONNEL (N=61)
TROUBLESHOOTING MAINTENANCE CLUSTER (N=200)
GRP 249
GRP 258 FLIGHTLINE TROUBLESHOOTING PERSONNEL (N=164)
GRP 296 GENERAL ELECTRICAL SYS MAINT & TROUBLESHOOTING (N=20)
GRP 342 TROUBLESHOOTING QUALITY CONTROL PERSONNEL (N=9)
GRP 294 AVIONICS MAINTENANCE SPECIALISTS (N=5)
IN-SHOP MAINTENANCE CLUSTER (N=142)
GRP 224
GRP 252 POMO/FIGHTER MAINT PERSONNEL (N=103)
GRP 517 TRAINING CENTER TEST EQUIPMENT MAINT PERS (N=6)
GRP 381 BENCH CHECKING SPECIALISTS (N=15)
GRP 254 NON-POMO MAINT & INSPECTION PERS (N=32)
GRP 317 BATTERY MAINTENANCE SPECIALISTS (N=6)
TROUBLESHOOTING INSPECTION CLUSTER (N=30)
GRP 199
GRP 276 RECORDS AND REPORTS PERSONNEL (N=6)
GRP 384 OVERSEAS OV-10 MAINT PERS (N=5)
GRP 387 LOGISTICS SUPPORT SPECIALISTS (N=10)
GRP 305 LIGHTING AND ANTI-SKID CIRCUIT SPECIALISTS (N=5)
GRP 098 SUPERVISORY CLUSTER (N=129)
GRP 308 LINE AND SHOP NCOICs (N=51)
GRP 10[illegible] BRANCH AND SENIOR NCOICs (N=41)
GRP 123 SPECIALIST FLIGHTLINE SUPERVISORS (N=35)
GRP 094 QUALITY CONTROL INSPECTORS CLUSTER (N=20)
GRP 378 SENIOR QUALITY CONTROL INSPECTORS (N=12)
GRP 421 FTD INSTRUCTORS AND INSPECTORS (N=5)
GRP 065 DEPOT LEVEL MAINTENANCE CLUSTER (N=31)
GRP 207 SOLID-STATE COMPONENT & TEST EQUIP MAINT (N=5)
GRP 261 GENERAL AIRCRAFT ELECTRICAL SYSTEMS MAINTENANCE (N=11)
GRP 231 LINE QUALITY CONTROL PERSONNEL (N=5)
GRP 029 TRAINER CLUSTER (N=40)
GRP 071 FTD INSTRUCTORS (N=18)
GRP 120 IN-RESIDENCE TRAINING INSTRUCTORS (N=16)
GRP 304 TECHNICAL TRAINING INSTRUCTORS (N=4)
GRP 015 MAINTENANCE CONTROL AND SCHEDULING CLUSTER (N=26)
GRP 323 SCHEDULERS (N=5)
CLUSTER
SUBCLUSTER
JOB TYPE
INDEPENDENT JOB TYPE

I. BATTERY SHOP CLUSTER (GRP091, N=80)

A Battery Shop Supervisors Job Type (GRP264, N=5)
B. Test Equipment Maintenance Personnel Job Type (GRP446, N=16)
C. Troubleshooting Personnel Job Type (GRP437, N=9)
D. Component Bench Checking Personnel Job Type (GRP253, N=6)
E. Tool Control Personnel Job Type (GRP288, N=8)
F. Pure Battery Maintenance Personnel Job Type (GRP405, N=5)

II. FLIGHTLINE MAINTENANCE CLUSTER (GRP260, N=815)

A. Flightline POMO Personnel Subcluster (GRP382, N=311)

1. Depot Level Maintenance Job Type (GRP612, N=5)
2. Shift Supervisors Job Type (GRP499, N=18)
3. OJT Trainers Job Type (GRP478, N=5)

B. Flightline Non-POMO Personnel Subcluster (GRP399, N=379)

1. Line Supervisors Job Type (GRP533, N=61)
2. FTD Trainers Job Type (GRP466, N=7)

C. Shift Supervisors Job Type (GRP407, N=8)
D. MAC General Flightline Maintenance Personnel Job Type (GRP468, N=26)
E. Advanced Reconnaissance Aircraft Maintenance Personnel Job Type (GRP416, N=6)
F. Basic Aircraft Electrical Systems Maintenance Personnel Subcluster (GRP349, N=73)
G. C-5A Aircraft Systems Maintenance Specialists Job Type (GRP326, N=5)

III. TRANSIENT AIRCRAFT MAINTENANCE PERSONNEL INDEPENDENT JOB TYPE (GRP346, N=61)

IV. TROUBLESHOOTING AND MAINTENANCE CLUSTER (GRP249, N=200)

A. Flightline Troubleshooting Personnel Subcluster (GRP358, N=164)

B. General Electrical Systems Maintenance and Troubleshooting Personnel Subcluster (GRP296, N=20)

1. Troubleshooting Quality Control Personnel Job Type (GRP342, N=9)

V. AVIONICS MAINTENANCE SPECIALISTS INDEPENDENT JOB TYPE (GRP294, N=5)

VI. IN-SHOP MAINTENANCE CLUSTER (GRP224, N=142)

A. POMO/Fighter Maintenance Personnel Subcluster (GRP252, N=103)

1. Training Center Test Equipment Maintenance Personnel Job Type (GRP517, N=6)
2. Bench Checking Specialists Job Type (GRP381, N=15)

B. Non-POMO Maintenance and Inspection Personnel Subcluster (GRP254, N=32)

1. Battery Maintenance Specialists Job Type (GRP317, N=6)

VII. TROUBLESHOOTING AND INSPECTION CLUSTER (GRP199, N=30)

A. Records and Reports Personnel Job Type (GRP276, N=6)

VIII. OVERSEAS OV-10 MAINTENANCE PERSONNEL INDEPENDENT JOB TYPE (GRP384, N=5)

IX. LOGISTICS SUPPORT SPECIALISTS INDEPENDENT JOB TYPE (GRP387, N=10)

X. LIGHTING AND ANTI-SKID CIRCUIT SPECIALISTS INDEPENDENT JOB TYPE (GRP305, N=5)

XI. SUPERVISORY CLUSTER (GRP098, N=129)

A. Line and Shop NCOICs Subcluster (GRP308, N=51)
B. Branch and Senior NCOICs Subcluster (GRP165, N=41)
C. Specialist Flightline Supervisors Subcluster (GRP123, N=35)

XII. QUALITY CONTROL INSPECTORS CLUSTER (GRP094, N=20)

A. Senior Quality Control Inspectors Job Type (GRP378, N=12)
B. FTD Instructors and Inspectors Job Type (GRP421, N=5)

XIII. DEPOT LEVEL MAINTENANCE CLUSTER (GRP065, N=31)

A. Solid-State Component and Test Equipment Maintenance Personnel Job Type (GRP207, N=5)
B. General Aircraft Electrical Systems Maintenance Personnel Job Type (GRP261, N=11)

XIV. LINE QUALITY CONTROL PERSONNEL INDEPENDENT JOB TYPE (GRP233, N=5)

XV. TRAINER CLUSTER (GRP029, N=40)

A. FTD Instructors Subcluster (GRP073, N=18)
B. In-Residence Training Instructors Subcluster (GRP120, N=16)

1. Technical Training Instructors Job Type (GRP304, N=8)

XVI. MAINTENANCE CONTROL AND SCHEDULING CLUSTER (GRP015, N=26)

A. Schedulers Job Type (GRP323, N=5)

Of the survey respondents, 88 percent are grouped in the clusters and independent job types listed above. The remaining 12 percent perform jobs that are different enough so they do not group with any of the defined specialty jobs. Job titles given by the ungrouped respondents include: Aviation Electrical Specialist, Dispatcher, TO Monitor, NCOIC Tool Crib, and Support Equipment Electrician.

Group Descriptions

The following paragraphs contain brief descriptions of the job types, subclusters, clusters, or independent job types identified in the career ladder structure analysis. Selected background information and job satisfaction data are provided for these groups in Tables 5 and 6. Representative tasks for the groups discussed below are contained in Appendix A.

I. BATTERY SHOP CLUSTER (GRP091, N=80). The members of this cluster are relatively junior personnel, with 66 percent in their first enlistment and a large percentage (39 percent) holding a 3-skill level DAFSC. Most individuals in this cluster are assigned to SAC and TAC, with about one quarter assigned to a POMO unit. A wide range of aircraft are serviced, with the B-52G/H or KC-135 as the most reported.

Members of this cluster perform an average of 33 tasks and perform fewer technical tasks than many other groups in the career field; also, their JDI is 3.0, the lowest in the career field. The job satisfaction indicators reflect a low sense of fulfillment that could be a result of the simple narrow job indicated above. Most of their time is spent on battery-related tasks, such as:

clean nickel-cadmium batteries
assemble or disassemble nickel-cadmium batteries
inspect aircraft batteries
remove or install cells on nickel-cadmium batteries
clean lead acid batteries
remove or install connectors on nickel-cadmium batteries

There are several identifiable job types which vary slightly due to a few tasks performed in some other duty; however, the major portion of every group member's time is spent on battery maintenance tasks that are the cluster's core tasks. Therefore, the cluster description best describes the jobs within the six identified job types.

II. FLIGHTLINE MAINTENANCE CLUSTER (GRP260, N=815). This cluster is the largest in the career field, representing 45 percent of the total sample. Two-thirds of the cluster hold a 5-skill level DAFSC, with 27 percent holding a 7-skill level. Approximately half are in their first enlistment, with 37 percent working in a POMO unit. The major command users are TAC (32 percent), MAC (24 percent), SAC (23 percent), and USAFE (8 percent).

Members of this cluster perform an average of 112 tasks and spend three-quarters of their time performing basic maintenance tasks. They call themselves flightline specialists, with slightly higher than average job satisfaction. Some of the top reported tasks for the cluster are:

crimp wires to splices and terminals
isolate malfunctions on exterior lighting circuits
isolate malfunctions on AC generator systems
remove or install connector plugs
inspect fire and overheat detection circuit components
inspect interior lighting circuit components

Several job differences were apparent in this cluster. Most of the variations were due to MAJCOM and aircraft differences. This will be noted in the following discussion of the three subclusters and four job types within the cluster.

A. Flightline POMO Personnel Subcluster (GRP382, N=311). Members of this subcluster of personnel are predominately assigned to the tactical forces (TAC, 68 percent; USAFE, 18 percent; and PACAF, 5 percent), and perform basic flightline maintenance on fighter aircraft (A-10, F-4E, F-15, F-16, or F-111). Eighty-one percent of this subcluster are assigned to a POMO unit. An average of 94 tasks are performed by this group's members, with a JDI of 14.1. The job satisfaction indicators are above average for the career field. Unique tasks that distinguish this group are as follows:

isolate malfunctions on tail hook control circuits
inspect tail hook control circuit components
inspect speed brake control circuit components
isolate malfunctions on speed brake control circuits
inspect canopy control and warning circuit components
isolate malfunctions on nose-wheel steering circuits
isolate malfunctions on canopy control circuits

There are variations within this subcluster that are a result of the specific aircraft maintained. These are very minor and are indicative of the high degree of similarity among all members of the subcluster. There are several job types, however, that are worth pointing out because of some unique tasks performed that are not centered on a specific aircraft.

1. Depot Level Maintenance Personnel Job Type (GRP612, N=5). Members of this job type are all assigned to AFLC, and call themselves depot maintenance personnel. They all hold at least a 5-skill level, with an average TAFMS of 94 months. The JDI is 14.2 and, instead of being associated with just one aircraft, they report working on several aircraft (F-4C/D/E, RF-4C, F-15, or F-16). The average number of tasks performed by this group is 98. Tasks reported by this group include:

perform TCTO modifications of aircraft electrical systems
remove or install connector pins on connector plugs
crimp wires to splices and terminals
replace compact wire bundles
rewire compact wire bundles
rewire aircraft electrical systems
crimp kapton wire to converter plug pins
perform proto-type time compliance technical orders (TCTO)

2. Shift Supervisors Job Type (GRP499, N=18). This job type has an average TAFMS of 128 months, with half of the members holding a 5-skill level and half a 7-skill level. They perform an average of 76 tasks and have a JDI of 12.6. The increase in experience level is reflected in the amount of time performing supervisory tasks. Some of the tasks that help to differentiate this group are listed below:

inspect aircraft electrical systems following maintenance
supervise Aircraft Electrical Systems Specialists (AFSC 42350)
make entries on AFTO Forms 781 (Aerospace Vehicle Flight Data Document)
supervise personnel other than AFSC 423X0
prepare airman performance reports (APR)

3. OJT Trainers Job Type (GRP478, N=5). This job type is comprised mostly of TAC personnel who hold at least a 5-skill level. An average of 97 tasks is reported with a JDI of 14.9 indicating a slightly harder than average job. Some distinguishing tasks performed by this group are listed below:

demonstrate how to locate technical information
conduct OJT
counsel trainees on training progress

observe in-process maintenance or make on the spot corrective actions
maintain training records, charts, or graphs
direct or implement OJT training programs
evaluate OJT trainees

The above mentioned job types basically are performing the same central tasks as the rest of the cluster, but were briefly discussed because of those unique tasks that made their job slightly different from the rest of the subcluster.

B. Flightline Non-POMO Personnel Subcluster (GRP399, N=379). This subcluster is composed of mostly MAC (41 percent) and SAC (43 percent) personnel who maintain the "heavy aircraft" (KC-135, B-52G/H, EC-135, CT-39, C-130, C-135, C-141, or C-5A). The group reports an average of 131 tasks, which is a somewhat broader job than the Flightline POMO Personel perform. Because of MAJCOM organizational differences, these individuals have a greater amount of interface with in-shop activities than the members of the Flightline POMO Personnel subcluster, thus illustrating why these individuals perform, on the average, more tasks and work a more difficult job. The JDI is 17, which is a relatively high amount of job difficulty for the Aircraft Electrical career ladder. Some of the unique tasks that distinguish this group are listed below:

isolate malfunctions on galley or latrine electrical circuits
isolate malfunctions on nesa glass anti-icing circuits
inspect nesa glass anti-icing circuit components
inspect galley or latrine electrical circuit components
remove or install nesa glass anti-icing circuit components
inspect crew entry door control and warning circuits
isolate malfunctions on cargo door control and warning circuits

About 35 percent of this subcluster are in their first enlistment. This subcluster contains many slight variations due to specific aircraft; however, two job types are different enough to warrant a brief description in addition to this subcluster description.

1. Line Supervisors Job Type (GRP533, N=61). This job type of supervisors is composed mostly of MAC (51 percent) and SAC (38 percent) personnel, with three-fourths holding a 7-skill level. They have an average of 122 months in the career field and 132 months TAFMS. With an average of 148 tasks performed and a JDI of 18.8, the addition of supervisory tasks to the required technical expertise of the job is clearly illustrated. This is one of the most difficult jobs in the career field, and one of the least satisfying. Tasks which distinguish this group from the subcluster are listed below:

supervise Aircraft Electrical Systems Specialists (AFSC 42350)
coordinate with maintenance control on maintenance activities
inspect aircraft electrical systems following maintenance
supervise Aircrft Electrical Systems Helpers (AFSC 42330)
counsel personnel on personal or military-related matters
determine work priorities
interpret policies, directives, or procedures for subordinates

2. FTD Trainers Job Type (GRP466, N=7). Six of the seven members of this job type are assigned to ATC, with the other member assigned to PACAF in some training capacity. All but one member hold a 7-skill level. The average grade is E-6, with an average of 159 months in the career field. This group performs an average of 130 tasks and has a JDI of 18.9, indicating the additional demands of their job. The satisfaction indicators are also very high. The reason these trainers broke out in this subcluster is reflected in the aircraft systems they teach and maintain. The following is a list of distinguishing tasks:

conduct field training detachment (FTD) classroom training
demonstrate how to locate technical information
counsel trainees on training progress
procure training aids, space, or equipment
administer or score tests
develop course curricula, plans of instruction (POI), or specialty training standards (STS)
write test questions or develop tests

Even though these job types have been specifically mentioned, the individuals are basically performing the same technical tasks that the remainder of the subcluster is performing.

C. Shift Supervisors Job Type (GRP407, N=8). The individuals in this job type call themselves Shift Supervisors. They are all assigned to SAC, and three-quarters hold a 7-skill level. The assignment to SAC is reflected in the unique aircraft they service. (As well as the basic SAC aircraft, they report maintaining the UH-1F, U-2, TR-1, or SR-71.) An average of 96 tasks and a JDI of 14.4 is reported for this job type. Some tasks that help to distinguish this group are as follows:

inspect aircraft electrical systems following maintenance
supervise Aircraft Electrical Systems Specialists (AFS 42350)
supervise Aircraft Electrical Systems Helpers (AFSC 42330)
make entries on AFTO Forms 781 (Aerospace Vehicle Flight Data Document)
observe in-process maintenance or make on the spot corrections
conduct OJT
isolate malfunctions on water injection circuits
remove or install truck leveling systems

In addition to the above representative tasks, this group also performs a number of training tasks, but they report very little time doing these tasks.

D. MAC General Flightline Maintenance Personnel Job Type (GRP468, N=26). This job type of personnel is very junior, with an average time in the career field of 25 months and an average TAFMS of 31 months. The average grade is E-3, with 31 percent holding a 3-skill level. Most of the personnel are assigned to MAC (85 percent) and 88 percent are in their first enlistment. The JDI is 12.4 and the average number of tasks performed is 76, which reflects a relatively narrow job when compared with the rest of the cluster. The main aircraft serviced are the C-5A, C-141, C-130, or KC-135. A few of the most common tasks performed in this job type are given below:

isolate malfunctions on fire and overheat detection circuits
inspect fire and overheat detection circuit components
replace fuses, current limiters, or circuit breakers
remove or install connector plugs
isolate malfunctions on cargo door control and warning lights
isolate malfunctions on galley or latrine electrical circuits

The tasks where 50 percent of this group's time is spent are virtually all simple, basic electrical systems maintenance tasks, as one would expect given the relatively high number of 3-skill level personnel. This group is slightly more satisfied than the average group in this career field.

E. Advanced Reconnaissance Aircraft Maintenance Personnel Job Type (GRP416, N=6). This job type contains senior-level personnel who all have a 7-skill level and an average time in the career field of 133 months. These individuals maintain a very specialized and complex group of aircraft (SR-71 or

TR-1). Tasks performed by this group average 136 with a JDI of 17.7, reflecting the complex, specialized electrical systems maintained. A selection of some distinguishing tasks are listed below:

inspect aircraft batteries
assemble or disassemble silver zinc batteries
perform solderless connector insertions or extractions
inspect shop test equipment or test stands
isolate malfunctions on fuel control warning circuits
inspect face heat system circuit components
conduct OJT

F. Basic Aircraft Electrical Systems Maintenance Personnel Subcluster (GRP349, N=73). This subcluster of aircraft electricians are servicing aircraft with basic aircraft electrical systems, such as the T-38, T-37, T-33, OV-10, or O-2A. About three-quarters are holding a 5-skill level, with most of the group in ATC (43 percent) or TAC (36 percent). The average time in the career field is 43 months, with the majority in their first enlistment and about one-third assigned to a POMO unit. The average number of tasks performed in this job type is 103 with a JDI of 13.8, which is slightly higher than normal. The following are some representative tasks performed by the individuals in this subcluster:

crimp wires to splices and terminals
isolate malfunctions on exterior lighting circuits
inspect electrical bonds or grounds
remove or install rotating beacons, landing lights, or taxi lights
clean connector plugs
replace fuses, current limiters, or circuit breakers

The maintenance tasks listed above reflect the basic nature of the aircraft electrical systems maintained and the average difficulty of the jobs performed within this subcluster. There are some variations within this subcluster that are due to specific aircraft maintained.

G. C-5A Aircraft Systems Maintenance Specialists Job Type (GRP326, N=5). This job type is a group of 5-skill level personnel who are all assigned to MAC and who have an average TAFMS of 42 months. They report that the main aircraft serviced at their base of assignment is the C-5A. Because of the single aircraft serviced, these individuals perform an average of only 84 tasks and have a JDI of 12.5, which is slightly below the average job difficulty. A few of the unique tasks performed by this group are noted here:

remove or install proximity sensors
inspect ram air turbine (RAT) circuit components
bench check asymmetry and spoiler components
inspect proximity sensors
isolate malfunctions on flight control asymmetry system circuits
isolate malfunctions on kneeling system circuits
isolate malfunctions on cargo door control and warning circuits

These individuals are specialized on one aircraft and perform tasks that are unique to the C-5A. This lack of variety may account for the low job satisfaction reported by members of this group. One last item of interest for this group is that 60 percent report the use of a mini- and/or microcomputer in the performance of their jobs.

A summary of this cluster shows us that most of these 815 individuals report themselves as Flightline Maintenance personnel. Most of the variation throughout the cluster is due to the different aircraft serviced. When applicable, those groups that performed some unique job or that were specialized in some way were discussed separately so that a clear picture could be drawn of flightline maintenance work in the Aircraft Electrical Systems career ladder.

III. TRANSIENT AIRCRAFT MAINTENANCE PERSONNEL INDEPENDENT JOB TYPE (GRP346, N=61). This independent job type is a mixed group of individuals whose job is to maintain transient aircraft in addition to their assigned aircraft. The MAJCOM representation for this group is 20 percent, AFSC; 18 percent, SAC; 16 percent, ATC; 15 percent, MAC; 12 percent, TAC; 10 percent, PACAF; 5 percent, USAFE; and 5 percent, other commands (an unusually heterogeneous MAJCOM representation for this career field). About 90 percent hold at least a 5-skill level and slightly more than half are in their first enlistment. This group has a very broad job with an average of 282 tasks performed, which is significantly more than any other group in the career field. The JDI for this group is 22.3. The job satisfaction indicators for this group are a little above average, but reenlistment intentions are a little low. Virtually every aircraft in the USAF inventory is maintained by members of this group. A few of the most common tasks performed by this independent job type include:

isolate malfunctions on battery distribution circuits
isolate malfunctions on fire and overheat detection circuits
isolate malfunctions on AC generator systems
fabricate wiring harnesses
inspect aircraft direct current (DC) power generator circuit and distributions circuit components
bench check external lighting circuit components
crimp wires to splices and terminals

inspect landing gear control and warning circuit components

Not only is this group performing the same core tasks as the Flightline Maintenance cluster, but members are also performing many of the core tasks of the Troubleshooting and In-Shop Maintenance clusters. This group of specialists performs a difficult job that requires the knowledge and ability to maintain several types of aircraft at any one time. A total of 21 different aircraft are maintained by 10 percent or more of this cluster. This independent job type is one of the few groups in this career field that cuts across all MAJCOM maintenance organization boundaries.

IV. TROUBLESHOOTING AND MAINTENANCE CLUSTER (GRP249, N=200). The MAJCOM distribution for this cluster is TAC (31 percent), MAC (30 percent), SAC (21 percent), and USAFE (10 percent). Close to 60 percent of the cluster members are in their first enlistment, while the group as a whole reports an average TAFMS of 54 months. The average grade for this cluster is E-4, with 82 percent holding a 5-skill level. The average number of tasks performed by this cluster is 66, which is somewhat less than normal, and the JDI of 11.3 is a little less than average in job difficulty. Most tasks center on isolating malfunctions and general electrical systems maintenance. Some of the more common tasks performed by this cluster are:

isolate malfunctions on AC generator systems
isolate malfunctions on exterior lighting circuits
isolate malfunctions on fire and overheat detection circuits
isolate malfunctions on internal lighting circuits
crimp wires to splices and terminals
isolate malfunctions on landing gear control and warning circuits
isolate malfunctions on warning circuits

This group of individuals perform a somewhat specialized job that involves large amounts of time troubleshooting aircraft electrical systems. The main aircraft serviced by this cluster are the KC-135, B52G/H, C-5A. C-141, C-130, F-4E, and F-15. Two subclusters within this cluster warrant further discussion.

A. Flightline Troubleshooting Personnel Subcluster (GRP358, N=164). The major portion of the cluster members is part of this subcluster. The variations within this subcluster are due to aircraft serviced (and, consequently, MAJCOMs). The most identifying factor for this group is the great amount of time spent on flightline troubleshooting activities. Listed below are a few representative tasks:

isolate malfunctions on anti-skid circuits
isolate malfunctions on external power system circuits
isolate malfunctions on aircraft flight control circuits
solder wires to connector plugs, control boxes, or control panels
isolate malfunctions on electrical or air operated starter circuits
isolate malfunctions on nesa glass anti-icing circuits

This group represents the "pure" technical troubleshooters across the MAJCOMs listed in the cluster description. The key factor for this subcluster is the relative amount of time spent troubleshooting, in addition to the general aircraft electrical systems maintenance that is done on the flightline.

B. General Electrical Systems Maintenance and Troubleshooting Personnel Subcluster (GRP296, N=20). This subcluster is spending a large amount of time on troubleshooting tasks, but in contrast to the above subcluster this group of individuals is spending more time on general aircraft electrical systems maintenance and other duties. The MAJCOM distribution for this subcluster has TAC and USAFE with three-quarters of the personnel and MAC and AFSC with the other quarter. The average number of tasks performed drops to 52 and the JDI is down to 8.8, marking a significant decrease in job difficulty compared to the other subcluster. There is a corresponding drop in reenlistment intentions, even though other job satisfaction indicators are about the same. A few representative tasks will illustrate the difference between the two subclusters:

remove or install connector plugs
remove or install pins on connector plugs
perform TCTO modifications of aircraft electrical systems
remove or install fire or overheat loops
inspect electrical systems for corrosion
remove or install anti-skid circuit components

More time is spent by this group on duties other than isolating malfunctions than is spent by the other subcluster, though this subcluster spends a large amount of their time performing troubleshooting activities. The variations within this subcluster revolve around other duties rather than specific aircraft, but none of them are significant enough for discussion.

V. AVIONICS MAINTENANCE SPECIALISTS INDEPENDENT JOB TYPE (GRP294, N=5). This independent job type is composed solely of MAC personnel. This junior group of personnel has an average grade of E-3 and an average of 36 months TAFMS. Four of the five are in their first enlistment with three holding a 5-skill level. The average number of tasks for this group is 70 with a

JDI of 10.4, somewhat below average in job difficulty. The aircraft serviced are somewhat unique for this group (C-9, C-140, CT-39, or C-130). The members of this job group report working in avionics maintenance shops. A few of the more common tasks performed are listed below:

adjust proximity sensors
inspect proximity sensors
remove or install proximity sensors
perform solderless connector insertions or extractions
inspect control boxes or junction boxes for burning or chaffing
pot connectors or relays
rewire aircraft electrical systems
replace micro switches

This group of individuals is particularly specialized because of the limited number of tasks performed and the time spent maintaining proximity sensors. When these tasks are contrasted with the rest of the career field, the comparison serves to illustrate their unique job status.

VI. IN-SHOP MAINTENANCE CLUSTER (GRP224, N=142). Members of this cluster identify themselves as electrical shop personnel. Not only are they performing many general electrical systems maintenance tasks, but they are spending a unique amount of time performing in-shop related tasks. TAC (50 percent) is the largest command represented in this cluster, with USAFE (20 percent) and SAC (16 percent) being the other main commands. Conspicuously missing from this cluster are personnel assigned to MAC. The reason for MAC not being represented is the way they have organized their maintenance activities so the aircraft electrician performs many of the flightline maintenance activities while interfacing with in-shop maintenance activities to a much greater degree than the other MAJCOMs. This cluster reports an average of 97 tasks performed and have a JDI of 12.5, indicating an average job difficulty. Some of the tasks that help to distinguish this cluster are listed below:

perform capacitance tests or services on nickel-cadmium batteries
maintain battery charges
inspect shop test equipment of test stands
perform capacitance tests on lead acid batteries
bench check external lighting circuit components
bench check constant speed drive (CSD) components
bench check internal lighting circuit components

This cluster has an average grade of E-4, with 60 percent in their first enlistment and an average TAFMS of 53 months. Almost half are assigned to a POMO unit, and 80 percent hold at least a 5-skill level. There are two main subclusters and three job types within the subclusters that will be briefly discussed.

A. POMO/Fighter Maintenance Personnel Subcluster (GRP252, N=103). TAC and USAFE account for almost 90 percent of this subcluster. About 85 percent hold a 5-skill level or better, with an average of 55 months TAFMS. The main aircraft serviced by this group are the RF-4C, F-4C/D/E, A-10, F-111, F-15, or F-16. The JDI for this group is 13.7 with the average number of tasks performed at 107. The following tasks are common to this subcluster:

bench check AC generators with conventional components
bench check warning light circuit components
isolate malfunctions on battery chargers
assemble or disassemble connector plugs
remove or install relays in control boxes or panels
remove or install cells on nickel-cadmium batteries
inspect parts received for serviceability

This group spends the greatest portion of their time in the shop environment performing shop-related tasks on fighter aircraft. Within this subcluster, there are two unique job types that are worth noting.

1. Training Center Test Equipment Maintenance Personnel Job Type (GRP517, N=6). Most of this job type are assigned to ATC, with 50 percent in their first enlistment. They service the F-5B, A-10, or the T-38. An average of 93 tasks are performed by this group and it has a JDI of 12.5. The reenlistment intention for this job type is very low, even though the other job satisfaction indicators are relatively high. A few of the unique tasks for this group are listed below:

rewire or replace components on locally manufactured test equipment
isolate malfunctions on portable DC rectifiers
maintain aircraft generator test stands (vari-drives)
fabricate electrical leads
maintain portable DC rectifiers
isolate malfunctions on Aerospace Ground Equipment (AGE) electrical equipment circuits
maintain battery chargers

A lot of time is spent by this group in maintenance and using test equipment, as well as performing maintenance on several aircraft systems.

2. Bench Checking Specialists Job Type (GRP381, N=15). This job type of individuals is unique for this career feld in the amount of time spent performing bench checking tasks. Almost all members hold a 5-skill level DAFSC, and more than 90 percent are assigned to TAC and USAFE. The average time in the career field is 37 months, with more than half of the group in their first enlistment and 80 percent assigned to a POMO unit. The average number of tasks performed by this group is 65 and the JDI is 8.7, indicating a limited, specialized job. Job satisfaction indicators are all low, reflecting the limited nature of the job. The tasks listed in the subcluster description are basically representative of this group; however, because of the specialization of this job type, personnel are spending a much greater amount of time performing those same core tasks.

B. Non-POMO Maintenance and Inspection Personnel Subcluster (GRP254, N=32). The main MAJCOM in this subcluster is SAC with 63 percent, with the tactical forces (USAFE, PACAF, TAC, and AAC) accounting for most of the remainder. There is a relatively high number of group members in their first enlistment (72 percent), with an average time in the career field of 30 months and an average TAFMS of 46 months. The main aircraft serviced by this group are mostly the 135 class (KC/RC/EC/C-135) or the B-52G/H. The average number of tasks performed by this subcluster is 68, with a JDI of 8.7. The job satisfaction indicators were all average. Some of the regularly performed tasks are shown below:

perform capacitance tests or services on nickel-cadmium batteries
remove or install anti-skid circuit components
isolate malfunctions on nesa glass anti-icing systems
pot conectors or relays
inspect nesa glass anti-icing circuit components
perform solderless connector insertions or extractions
assemble or disassemble nickel-cadmium batteries

In addition to performing bench checking tasks, this groups spends a lot of time doing battery related tasks. Within this subcluster, there is one job type that spends most of their time doing battery tasks.

1. Battery Maintenance Specialists Job Type (GRP317, N=6). All of the members of this job type are assigned to the tactical forces, with 100 percent holding a 5-skill level. They are junior personnel who report an average of 25 months time in the career field. All but one are in their first enlistment and are assigned to a POMO unit. The average number of tasks performed by this group is 50 and the JDI is 6.9, all of which indicates a very easy job performing specialized tasks. (NOTE: The difference between this group and the battery maintenance cluster is the number of other maintenance tasks that are performed by this group in addition to the core battery tasks.)

The job satisfaction indicators are all relatively high. A few prominent tasks for this job type are listed below:

perform capacitance tests or services on nickel-cadmium batteries
remove or install cells on nickel-cadmium batteries
assemble or disassemble nickel-cadmium batteries
inspect aircraft batteries
clean nickel-cadmium batteries
clean lead acid batteries
perform capacitance tests on lead acid batteries

This group is performing battery tasks, and spend a lot of time performing them when compared to the rest of the cluster. Under the POMO system, they are a part of the in-shop activities, but they are performing a specialized and relatively easy job.

VII. TROUBLESHOOTING AND INSPECTION CLUSTER (GRP199, N=30). This cluster of personnel is virtually all in the tactical forces (TAC, 63 percent; USAFE, 27 percent; PACAF, 7 percent), with 77 percent assigned to a POMO unit. The average grade is E-4, and almost half are in their first enlistment. The JDI for this cluster is 11.0 and the average number of tasks performed is 53, indicating a specialized job. Some representative tasks for this cluster are given below:

isolate malfunctions on warning light circuits
isolate malfunctions on fire and overheat detection circuits
inspect fire and overheat detection circuit components
isolate malfunctions on anti-skid circuits
inspect landing gear control and warning circuit components
inspect aircraft electrical systems following maintenance
inspect electrical systems for corrosion

These individuals are performing a quality control inspection function for the troubleshooting cluster at a line maintenance level. There is a job type within this cluster that spends more time filling out maintenance forms, but they are performing essentially the same tasks as those listed for the cluster as a whole.

VIII. OVERSEAS OV-10 MAINTENANCE PERSONNEL INDEPENDENT JOB TYPE (GRP384, N=5). This independent job type is composed entirely of USAFE personnel holding a 5-skill level and who exclusively maintain the OV-10 aircraft. The average grade is E-4, with an average time in the career field of 37 months and an average TAFMS of 50 months. All are assigned to a POMO unit and report performing an average of 53 tasks. The JDI is 8.6, which indicates a fairly simple specialized job. A few of the most commonly reported tasks are listed below:

isolate malfunctions on flap and slat control and warning circuits
crimp wires to splices or terminals
isolate malfunctions on landing gear control and warning circuits
assemble or disassemble connector plugs
isolate malfunctions on internal lighting circuits
remove or install rotating beacons, landing lights, or taxi lights

This group performs many of the basic maintenance tasks of this career field, but they perform those tasks strictly on the OV-10. The amount of time they spend doing those basic tasks reflects the main distinguishing factor of this independent job type.

IX. LOGISTICS SUPPORT SPECIALISTS INDEPENDENT JOB TYPE (GRP387, N=10). This independent job type is mostly PACAF, and members report themselves as working in the PACAF Logistics Support Center. All have at least a 5-skill level, with an average time in the career field of 60 months and an average TAFMS of 70 months. Forty percent are in their first enlistment and the main aircraft serviced by this independent job type are the same as those assigned to PACAF as a whole. They report performing 121 tasks on the average, and have a JDI of 16.5, which seems to indicate a broad job that is moderately difficult to perform. Members are all quite satisfied with what they are doing in their jobs. Some common tasks for this group are presented below:

bench check constant speed drive (CSD) components
isolate malfunctions of constant speed drive (CSD) circuits
assemble or disassemble transformer-rectifier (TR) units
bench check transformer-rectifier (TR) circuit conventional components
remove or install solid-state circuit boards
perform soldering on solid-state circuit boards

These tasks give a flavor of what this independent job type is doing at the PACAF Logistics Support Center. They are spending slightly more time maintaining solid-state circuits and components than most of the career field. From the task listing, it appears that this group of individuals is performing a depot level maintenance function for PACAF.

X. LIGHTING AND ANTI-SKID CIRCUIT SPECIALISTS INDEPENDENT JOB TYPE (GRP305, N=5). Here is an independent job type of individuals who are spending a great amount of time maintaining lighting and anti-skid circuits. The group is mostly TAC, with 60 percent of its members assigned to a POMO unit. The average time in the career field is 43 months, with an average TAFMS of 72 months. The average number of tasks performed by this group is 23 and the JDI is 6.1, which indicates a highly specialized job but relatively simple to perform. The main tasks performed by this group are listed below:

isolate malfunctions on exterior lighting circuits
isolate malfunctions on interior lighting circuits
remove or install anti-skid circuit components
isolate malfunctions on warning light circuits
crimp wires to splices or terminals
isolate malfunctions on anti-skid circuits

Because of the limited number of tasks performed by this group, the amount of time spent doing any one task is quite large. The tasks listed above represent better than 30 percent of this group's time. The main aircraft they service are the F-15, F-4C/E, or F-5A/B.

XI. SUPERVISORY CLUSTER (GRP098, N=129). This cluster is clearly the pure supervisory group for the 423X0 career ladder, as compared to the first-line supervisors mentioned in previous job group descriptions. The average grade of this group is E-6, with the average time in the career field of 142 months and a TAFMS average of 174 months. Half report they are assigned to a POMO unit, with the MAJCOM distribution about the same as the total career field. More than three-quarters hold a 7-skill level, and almost every aircraft is maintained by some group members. The average number of tasks performed by this group is 96, with a JDI of 15.0. A few of the tasks that characterize the cluster are contained in the following list:

counsel personnel on personal or military-related matters
prepare airman performance reports (APR)
supervise Aircraft Electrical Systems Specialists (AFSC 42350)
determine work priorities

plan or schedule work assignments
indorse airman performance reports (APR)

These tasks are representative of the supervisory tasks performed by most members in the cluster. Within this job group, there are three main subclusters. No job types were identified because there were only minor variations within the subclusters; therefore, the subcluster descriptions given below will adequately describe all members and jobs within the subclusters.

A. Line and Shop NCOICs Subcluster (GRP308, N=51). This subcluster represents the most technical group of supervisors in the cluster. Members are still doing a lot of technical tasks as well as the main supervisory duties. All of the surveyed commands are represented in this subcluster in relative proportion to the career field distribution. All hold at least a 5-skill level, with almost 80 percent holding a 7-skill level. The average time in the career field is 146 months, with the average TAFMS being 169 months. About half report being assigned to a POMO unit and have an average grade of E-6. The main aircraft serviced by this group are the KC-135, B-52G/H, F-111, F-16, EC-135, C-130, or UH-1N. An average of 150 tasks are performed, with a JDI of 18.5, which illustrates the addition of the supervisory tasks to the regular technical expertise required. Some of the more common tasks for this subcluster are listed below:

supervise Aircraft Electrical Systems Specialists (AFSC 42350)
determine work priorities
inspect aircraft batteries
inventory equipment, tools, or supplies
develop shop test equipment or test stands
inspect aircraft electrical systems following maintenance

These NCOs are involved in all aspects of shop operation as can be seen by the tasks listed above. Most of the technical tasks are still performed, but the preponderance of time is spent performing supervisory tasks.

B. Branch and Senior NCOICs Subcluster (GRP165 N=41). Of all the groups identified in this occupational survey report, this subcluster is the most senior, with an average grade of E-7 and an average time in the career field of 164 months and 198 months average TAFMS. USAFE and TAC account for nearly 50 percent of this subcluster, with MAC, SAC, AFSC, and ATC using 10 percent each and PACAF with 5 percent. Just about half are assigned to a POMO unit, and almost 90 percent hold a 7-skill level. Of the supervisory groups, this group has the highest percentage of individuals who are not currently maintaining any aircraft systems, the others report maintaining the A-10, C-5A, C-135, or KC-135. The average number of tasks performed is 58 and the JDI is 13.5, indicating the loss of the technical tasks to the demands of the supervisory responsibilities. A few of the tasks common to this subcluster are listed below:

interpret policies, directives, or procedures for subordinates
draft correspondence
evaluate inspection reports or procedures
assign personnel to duty positions
determine requirements for personnel
schedule leaves or passes
analyze workload requirements

In the write-in comments, many members of this subcluster identified themselves as branch-level managers. The nature of the tasks listed above indicates the senior level of responsibility given to these NCOs. Almost all of the tasks they perform are administrative in nature.

C. Specialist Flightline Supervisors Subcluster (GRP123, N=35). This subcluster is composed of supervisors who are responsible for the maintenance activities of several AFSCs in aircraft maintenance operations. They all hold at least a 5-skill level and have an average grade of E-6. The average TAFMS is 158 months and the average time in the career field is 115 months. Slightly more than half are assigned to a POMO unit, with 37 percent assigned to TAC, 14 percent to USAFE, 26 percent to MAC, and 6 percent each to SAC, ATC, and PACAF. The main aircraft serviced by this group are the F-15, A-10, C-130, or C-5A. The JDI is 11.3, with the average number of tasks performed reported at 56, indicating the loss of aircraft electrical systems maintenance responsibilities to the general maintenance function they perform. Some of the tasks that take up so much of their time are identified below:

supervise Aircraft Electrical Systems Specialists (AFSC 42350)
supervise personnel other than AFSC 423X0
counsel personnel on personal or military-related matters
plan or schedule work assignments
supervise Aircraft Electrical Systems Helpers (AFSC 42330)
supervise Aircraft Electrical Systems Technicians (AFSC 42370)
prepare airman performance reports (APR)

Many in this subcluster identified themselves as Specialist Flightline Supervisors who are not only monitoring the aircraft electrical systems maintenance, but who are also supervising the maintenance activities of personnel in AFSCs other than 423X0.

XII. QUALITY CONTROL INSPECTORS CLUSTER (GRP094, N=20). Here is a cluster of individuals who are performing a large number of inspection tasks and are generally monitoring the aircraft electrical maintenance being done. The average grade is E-6, with 85 percent holding a 7-skill level and an average TAFMS of 138 months. SAC is the major user with 45 percent, ATC uses 25 percent, and both MAC and PACAF use 10 percent. Over 65 percent report they currently do not maintain any aircraft electrical systems. The average number of tasks performed is 56, with a JDI of 11.5, which is consistent with the observational, quality control nature of this cluster's responsibilites. Some of the tasks that help to distinguish this cluster are listed below:

inspect aircraft electrical systems following maintenance
inspect electrical systems for corrosion
observe in-process maintenance or make on the spot corrections
perform special inspections of aircraft electrical systems
perform maintenance activity inspections or self-inspections
evaluate compliance with work standards
evaluate maintenance and use of workspace, equipment, or supplies
demonstrate how to locate technical information

Most of this cluster's time is centered around quality control activities. Most members report their current job title as being quality control specialists. There are two job types within the cluster. The first is a senior group of technicians who are performing essentially the same tasks as identified in the cluster description given above, yet they are spending slightly more time on fewer tasks. The second job type is discussed below.

B. FTD Instructors and Inspectors Job Type (GRP421, N=5). This group of FTD Instructors grouped with the quality control cluster due to the performance of the same inspection and quality control tasks performed in the training environment. All of these individuals are assigned to ATC, and they are teaching SAC aircraft electrical systems. They are all 7-skill levels with an average of 175 months in the career field and 185 months average TAFMS. The JDI for this job type is 13.7, with the average number of tasks performed, 74. A few of the tasks that distinguish this job type are listed below:

conduct field training detachment (FTD) classroom training
demonstrate how to locate technical information
develop course curricula, plans of instruction (POI), or specialty training standards (STS)
administer or score tests

procure training aids, space, or equipment
maintain training records, charts, or graphs

As well as the FTD training, members also perform essentially the same quality control tasks as the rest of the cluster, in the course of the training given.

XIII. DEPOT LEVEL MAINTENANCE CLUSTER (GRP065, N=31). This group is unique to the type of maintenance performed. The tasks are relatively simple technical tasks, but the time spent on basic aircraft electrical systems maintenance is tremendous when compared to the rest of the career field. Slightly more than half are assigned to AFLC, with 32 percent assigned to MAC. The average TAFMS is 59 months, with about 45 percent of the group's members in their first enlistment and 71 percent holding a 5-skill level. The average number of tasks performed is 36 and the JDI is a low 6.2, indicating a very simple, specialized job. Some of the tasks common to this cluster are listed below:

remove or install connector plugs
perform TCTO modifications of aircraft electrical systems
rewire aircraft electrical systems
fabricate wiring harnesses
fabricate compact wire bundles
perform proto-type compliance technical orders (TCTO)
fabricate electrical leads

The list could continue, but the main idea of the depot level maintenance activities of this cluster is clearly illustrated by the tasks listed above. There are two job types within this cluster that merit further discussion.

A. Solid-State Component and Test Equipment Maintenance Personnel Job Type (GRP207, N=5). This small group of unique individuals is spending a great amount of time performing tasks that deal with solid-state equipment maintenance. Most members are assigned to MAC, with 80 percent holding a 5- or 7-skill level. The main aircraft serviced are both the C-141 and the C-5A. The JDI for this group is 10.4, with 65 as the average number of tasks performed. A couple of the job satisfaction indicators are low, especially the use of training indicators. Some of the tasks that help make this group unique are listed below:

remove or install solid-state components on printed circuit boards
remove or install resistors or capacitors on solid-state circuit boards

perform soldering on solid-state circuit boards
remove or install solid-state circuit boards
bench check AC control panel solid-state components
clean internal parts of control boxes
assemble or disassemble control boxes
inspect shop test equipment or test stands

This group reports spending slightly more than average amount of time maintaining test equipment. As can be seen from the above list of tasks, a significant portion of their time is spent performing tasks that deal with solid-state technology.

B. General Aircraft Electrical Systems Maintenance Personnel Job Type (GRP261, N=11). This job type is composed solely of AFLC assigned personnel. The average grade for this group is E-4, with all of them holding at least a 5-skill level and an average time in the career field of 52 months. Nearly half are in their first enlistment and they report servicing the A-10, F-4C/D/E, F-16, F-111, or RF-4C. The average number of tasks performed is 39 with a JDI of 7.3, possibly accounting for the lower-than-normal job satisfaction indicators. The main tasks performed by this job type are listed below:

perform TCTO modifications of aircraft electrical systems
crimp wires to splices and terminals
rewire aircraft electrical systems
remove or install pins on connector plugs
fabricate wiring harnesses
perform proto-type time compliance technical orders (TCTO)

As can be seen, many of the tasks listed here are the same as those listed for the cluster. The major difference between this job type and the whole cluster is the amount of time spent performing fewer tasks within this job type, thus indicating a more specialized job group than the cluster.

XIV. LINE QUALITY CONTROL PERSONNEL INDEPENDENT JOB TYPE (GRP233, N=5). This independent job type is a mixed group of MAJCOMs (TAC, AFLC, AFSC, ATC) who report working with virtually every fighter aircraft in the USAF inventory. The average grade for this group is E-5, with an average TAFMS of 104 months. Members report an average of 12 tasks performed and a JDI of 5.0. Though these may seem low, the nature of the job seems to indicate the need for a high degree of technical expertise. The job satisfaction indicators are about average for this career field. The tasks that serve to distinguish this independent job type are given below:

inspect electrical systems for corrosion
inspect electrical systems following maintenance

perform maintenance activity inspections or self-inspections
observe in-process maintenance or make on the spot corrective actions
perform special inspections on aircraft electrical systems

Just the tasks listed above account for better than 50 percent of this group's time, indicating the highly specialized nature of this job and the close association with the line maintenance personnel.

XV. TRAINER CLUSTER (GRP029, N=40). This cluster of individuals is mostly composed of ATC instructors who are performing various training functions. Most of them report they are currently maintaining no aircraft electrical systems. At least a 5-skill level is held by everyone in the group and the average grade is E-6. The average time in the service is 136 months and the average TAFMS is 144 months. The average number of tasks performed is 22 with a JDI of 11.1, indicating the specialized nature of the training function. Rather than list any specific tasks performed by the cluster as a whole, it will be more useful to list specific tasks performed by the two subclusters discussed below.

A. FTD Instructors Subcluster (GRP073, N=18). The major tasks of this subcluster are the conducting of FTD training activities. The major commands are ATC with 94 percent and AFLC with 6 percent. The member of this group who is not assigned to ATC reports performing a field training function for AFLC. Almost 90 percent are holding a 7-skill level, with an average TAFMS of 180 months. The average number of tasks performed is 29 with a JDI of 11.4. This is a highly satisfied group of NCOs. Some of the distinguishing tasks performed by this group are listed below:

conduct field training detachment (FTD) classroom training
demonstrate how to locate technical information
maintain technical order (TO) files or TO compliance records
develop course curricula, plans of instruction (POI), or specialty training standards (STS)
counsel trainees on training progress
establish or maintain study reference files

B. In-Residence Training Instructors Subcluster (GRP120, N=16). This subcluster of personnel has a slightly lower experience level than the other subcluster. The average grade is E-5, with 70 percent holding a 5-skill level and the rest holding a 7-skill level. The average time in the career field is 82 months and the average TAFMS is 87 months. ATC represents about 75

percent of this group, while MAC represents about 20 percent. Members of this subcluster who are not assigned to ATC all report performing training duties as their main job. Most of the subcluster members do not maintain any aircraft electrical systems. Almost 40 percent are in their first enlistment, report performing an average of 19 tasks, and have a JDI of 10.0. Some distinguishing tasks performed by this group are listed below:

conduct resident course classroom training
administer or score tests
maintain training records, charts, or graphs
counsel trainees on training progress
evaluate progress of resident course students
counsel personnel on personal or military-related matters
write test questions or develop tests

The resident nature of this subcluster is reflected in the kinds of tasks performed, especially the personal counseling given to the trainees. There is an identified job type within this subcluster, but a description of it would not be useful since the tasks are essentially the same as this subcluster. The job type is just slightly more specialized by time spent on the tasks above than the rest of the subcluster.

XVI. MAINTENANCE CONTROL AND SCHEDULING CLUSTER (GRP015, N=26). This last cluster of personnel is a diverse group of individuals who are performing quite different jobs, but who are spending a lot of their time performing some common tasks. They are a senior group of people with an average grade of E-6, an average time in the career field of 157 months, and an average TAFMS of 174 months. The major commands are: MAC (27 percent); SAC and TAC (23 percent each) and USAFE (19 percent). The average number of tasks performed is 14, with a JDI of 7.5. They are a relatively satisfied group of supervisors. Some of the common tasks performed by the cluster are listed below:

coordinate with maintenance control on maintenance activities
determine work priorities
direct maintenance or utilization of equipment
supervise personnel other than AFSC 423X0
plan or schedule work assignments
direct development or maintenance of status boards, graphs, or charts

These are some of the common core of tasks performed by the cluster as a whole. Many of the members of this cluster call their current job title either maintenance control or maintenance scheduling. There is one job type in the cluster that will be briefly discussed.

A. Schedulers Job Type (GRP323, N=5). This job type has an average grade of E-6 and contains representatives from MAC, USAFE, SAC, and TAC. Eighty percent hold a 7-skill level, with an average time in the career field of 181 months and an average TAFMS of 196 months (one of the most senior groups in the career field). The average number of tasks performed is 15, with a JDI of 7.4, indicating a narrow, specialized job. A listing of the core tasks performed by this job type is given below:

direct development or maintenance of status boards, graphs, or charts
coordinate with maintenance control on maintenance activities
coordinate with material control on cannibalization of parts
evaluate alert or emergency procedures
determine work priorities
analyze workload requirements
plan or schedule work assignments
determine requirements for personnel

The time spent on these core tasks illustrates why they are called Schedulers. The maintenance performed is determined by the Schedulers whose job it is to establish work priorities. Very little, if any, technical work is performed in this job type.

Comparison of Specialty Jobs

Analysis of the 423X0 career ladder structure indicates the career ladder is very similar. There are 49 tasks that are performed by 50 percent or more of the career field members. The two major divisions in this AFSC are the applied and administrative functions.

Within the applied functional area are all of the technical maintenance activities, such as flightline maintenance, battery shop, troubleshooting maintenance, in-shop maintenance, depot level maintenance, and most of the independent job types. Within these subdivisions there are variations based on the aircraft serviced or the technical specialty assigned.

The administrative functional area is composed of such areas as supervisory, quality control, inspectors, trainers, and maintenance control and scheduling. Most of the variations within these administrative subdivisions are based on specific maintenance support activities.

Of the functional areas, the applied is by far the largest with 1,353 personnel or 76 percent of the total sample, while the administrative contains 231 individuals or 13 percent of the total sample. (NOTE: 12 percent of the total sample did not fall into any of the job groupings.)

As well as looking at the functional divisions, another way of comparing the specialty job groups is by looking at the job difficulty index (JDI). The JDI ranged from a low of 3.0 (battery shop) to a high of 22.3 (transient aircraft maintenance), with the average of the career field set at 13.0. Most of the line supervisors throughout the career ladder structure report a higher than average JDI (around 18.0), while the limited specialty jobs (like the battery maintenance and depot maintenance) reported a lower than average JDI (average of about 7.0). Finally, most of the technical jobs (such as flightline maintenance, in-shop maintenance, and troubleshooting maintenance) are reporting jobs that are about average in job difficulty.

In addition to comparing the specialty jobs by functional areas or by the JDI, we can also look at some selected background information and job attitudes. Table 5 gives a demographic look at the job groupings, while Table 6 shows that the career field, as a whole, is relatively satisfied with its current job. There are a few job groups that report dissatisfaction with their jobs, such as the battery shop and the depot maintenance personnel. The groups with a lot of responsibility and/or a broad technical job, like the FTD Trainers or the Line Supervisors, are the most satisfied.

Reenlistment intentions generally were high, with 65 percent of the total sample definitely planning to reenlist. The groups who showed the lowest reenlistment rates were either the dissatisfied groups mentioned above or some of the senior level job groupings that have a large number of members eligible for retirement. Overall, there appears to be a correlation between the level of responsibility and the technical demands of the job--and the job satisfaction and reenlistment indicators.

In summary, the career field members appear to be satisfied with their current job assignment, and the jobs they perform are organized into a structure that seems to be working well for the 423X0 career ladder.

TABLE 5

SELECTED BACKGROUND DATA FOR CAREER LADDER SPECIALTY JOB GROUPS

	FLIGHTLINE MAINT CLUSTER (GRP260)	FLIGHTLINE POMO PERS SUBCLUSTER (GRP382)	JOB TYPES: DEPOT-LEVEL MAINT PERS (GRP612)	JOB TYPES: SHIFT SUPERVISORS (GRP499)	JOB TYPES: OJT TRAINERS (GRP478)	FLIGHTLINE NON-POMO PERSONNEL SUBCLUSTER (GRP399)	JOB TYPES: LINE SUPERVISORS (GRP533)	JOB TYPES: FTD TRAINERS (GRP466)
NUMBER IN GROUP	815	311	5	18	5	379	61	7
PERCENT OF TOTAL SAMPLE	45%	17%	-	1%	-	21%	3%	-
PERCENT IN CONUS	78%	72%	80%	72%	80%	82%	77%	57%
PERCENT OVERSEAS	22%	28%	20%	28%	20%	18%	23%	43%
DAFSC DISTRIBUTION (PERCENT)								
42330	8	8	-	-	-	10	-	-
42350	65	65	80	50	80	58	26	14
42370	27	27	20	50	20	32	74	86
AVERAGE GRADE	E-4	E-4	E-5	E-5	E-5	E-4	E-5	E-6
AVERAGE TICF (MONTHS)	61	59	85	107	72	68	122	159
AVERAGE TAFMS (MONTHS)	72	71	94	128	84	78	132	162
PERCENT IN FIRST-ENLISTMENT	47%	45%	-	6%	-	35%	6%	-
AVG NUMBER OF TASKS PERFORMED	112	94	98	76	97	131	148	130
JOB DIFFICULTY INDEX (JDI) AVERAGE JDI = 13.0)	15.4	14.1	14.2	12.6	14.9	17.0	18.8	18.9

TABLE 5 (CONTINUED)

SELECTED BACKGROUND DATA FOR CAREER LADDER SPECIALTY JOB GROUPS

	SHIFT SUPERVISORS (GRP407)	MAC GEN FLIGHTLINE MAINT PERS (GRP468)	ADV RECON ACFT MAINT PERSONNEL (GRP416)	BASIC ACFT ELEC SYS MAINT PERS SUBCLUSTER (GRP349)	C-5A ACFT SYS MAINT SPECIALISTS (GRP326)	BATTERY SHOP CLUSTER (GRP091)	TRANSIENT AIRCRAFT MAINT PERS IJT (GRP346)
NUMBER IN GROUP	8	26	6	73	5	80	61
PERCENT OF TOTAL SAMPLE	-	1%	-	4%	-	4%	3
PERCENT IN CONUS	75%	92%	-	88%	100%	75%	80
PERCENT OVERSEAS	25%	8%	100%	12%	-	25%	20
DAFSC DISTRIBUTION (PERCENT)							
42330	-	31	-	11	20	39	10
42350	25	66	-	75	80	56	67
42370	75	4	100	14	-	5	23
AVERAGE GRADE	E-5	E-3	E-6	E-4	E-4	E-4	E-4
AVERAGE TICF (MONTHS)	105	25	133	43	38	33	63
AVERAGE TAFMS (MONTHS)	114	31	140	52	42	47	71
PERCENT IN FIRST-ENLISTMENT	-	88%	-	60%	80%	65%	56%
AVG NUMBER OF TASKS PERFORMED	96	76	136	103	84	33	282
JOB DIFFICULTY INDEX (JDI) (AVERAGE JDI = 13.0)	14.4	12.4	17.7	13.8	12.5	3.0	22.3

TABLE 5 (CONTINUED)

SELECTED BACKGROUND DATA FOR CAREER LADDER SPECIALTY JOB GROUPS

	TROUBLESHOOTING AND MAINTENANCE CLUSTER (GRP249)	FLIGHTLINE TROUBLESHOOTING PERSONNEL SUBCLUSTER (GRP358)	GEN ELEC SYS MAINT & TROUBLESHOOTING PERSONNEL SUBCLUSTER (GRP296)	AVIONICS MAINT SPECIALISTS IJT (GRP294)	TROUBLE-SHOOTING AND INSPECTION CLUSTER (GRP199)	OS OV-10 MAINT PERSONNEL IJT (GRP384)	LOGISTICS SUPPORT SPECIALISTS IJT (GRP387)	LIGHTING & ANTI-SKID CIR SPECIALISTS IJT (GRP305)
NUMBER IN GROUP	200	164	20	5	30	5	10	5
PERCENT OF TOTAL SAMPLE	11%	9%	1%	-	2%	-%	1%	-
PERCENT IN CONUS	72%	70%	75%	100%	63%	-	10%	60%
PERCENT OVERSEAS	28%	30%	25%	-	37%	100%	90%	40%
DAFSC DISTRIBUTION								
42330	8	9	5	40	17	-	-	20
42350	82	82	90	60	67	80	70	80
42370	11	10	5	-	17	20	30	-
AVERAGE GRADE	E-4	E-4	E-4	E-3	E-4	E-4	E-4	E-4
AVERAGE TICF	45	44	47	31	48	37	60	43
AVERAGE TAFMS	54	52	57	36	67	50	70	72
PERCENT IN FIRST-ENLISTMENT	58%	51%	40%	80%	47%	60%	40%	40%
AVG NUMBER OF TASKS PERFORMED	67	67	52	70	53	53	121	23
JOB DIFFICULTY INDEX (JDI)(AVERAGE JDI = 13.0)		11.3	11.5	8.8	10.4	11.0	8.6	16.5 6.1

TABLE 5 (CONTINUED)

SELECTED BACKGROUND DATA FOR CAREER LADDER SPECIALTY JOB GROUPS

	IN-SHOP MAINT CLUSTER (GRP224)	POMO/FTR MAINT PERS SUBCLUSTER (GRP252)	JOB TYPES: TNG CEN TEST EQUIP MAINT PERS (GRP517)	JOB TYPES: BENCH CHECKING SPECIALISTS (GRP381)	NON-POMO MAINT & INSP PERSONNEL SUBCLUSTER (GRP254)	JOB TYPE: BATTERY MAINT SPECIALISTS (GRP317)	LINE QC PERSONNEL IJT (GRP233)
NUMBER IN GROUP	142	103	6	15	32	6	5
PERCENT OF TOTAL SAMPLE	8%	6%	-	1%	2%	-	-
PERCENT IN CONUS	73%	74%	67%	53%	72%	33%	100%
PERCENT OVERSEAS	27%	26%	33%	47%	28%	67%	-
DAFSC DISTRIBUTION (PERCENT)							
42330	19	14	33	7	38	-	20
42350	72	76	50	93	60	100	40
42370	9	11	17	-	3	-	40
AVERAGE GRADE	E-4	E-4	E-4	E-4	E-4	E-3	E-5
AVERAGE TICF (MONTHS)	39	41	36	37	30	25	89
AVERAGE TAFMS (MONTHS)	53	55	42	55	46	38	104
PERCENT IN FIRST-ENLISTMENT	59%	55%	50%	60%	72%	83%	20%
AVG NUMBER OF TASKS PERFORMED	97	107	93	65	68	50	12
JOB DIFFICULTY INDEX (JDI)(AVERAGE JDI = 13.0)	12.5	13.7	12.5	8.7	8.7	6.9	5.0

TABLE 5 (CONTINUED)

SELECTED BACKGROUND DATA FOR CAREER LADDER SPECIALTY JOB GROUPS

		SUBCLUSTERS				JOB TYPE
	SUPERVISORY CLUSTER (GRP098)	LINE & SHOP NCOICs (GRP308)	BRANCH & SR NCOICs (GRP165)	SPECIALIST FLIGHTLINE SUPERVISORS (GRP123)	QC INSPECTORS CLUSTER (GRP094)	FTD INSTRUCTORS & INSPECTORS (GRP421)
NUMBER IN GROUP	129	51	41	35	20	5
PERCENT OF TOTAL SAMPLE	7%	3%	2%	2%	1%	-
PERCENT IN CONUS	70%	69%	68%	71%	70%	100%
PERCENT OVERSEAS	30%	31%	32%	29%	30%	-
DAFSC DISTRIBUTION (PERCENT)						
42330	-	-	-	-	-	-
42350	21	22	7	37	15	-
42370	77	78	88	63	85	100
AVERAGE GRADE	E-6	E-6	E-7	E-6	E-6	E-6
AVERAGE TICF (MONTHS)	142	146	164	115	129	175
AVERAGE TAFMS (MONTHS)	174	169	198	158	138	185
PERCENT IN FIRST-ENLISTMENT	1%	-	5%	3%	10%	-
AVG NUMBER OF TASKS PERFORMED	96	150	58	56	56	74
JOB DIFFICULTY INDEX (JDI)(AVERAGE JDI = 13.0)	15.0	18.5	13.5	11.3	11.5	13.7

TABLE 5 (CONTINUED)

SELECTED BACKGROUND DATA FOR CAREER LADDER SPECIALTY JOB GROUPS

	JOB TYPES			SUBCLUSTERS			
	DEPOT LVL MAINT CLUSTER (GRP065)	SOLID-STATE COMPONENT & TEST EQUIP MAINT PERS (GRP207)	GEN ACFT ELEC SYS MAINT PERSONNEL (GRP261)	TRAINER CLUSTER (GRP029)	FTD INSTRUCTORS (GRP073)	IN-RES TRAINING INSTRUCTORS (GRP120)	MAINT CONTR & SCHED CLUSTER (GRP015)	JOB TYPE SCHEDULERS (GRP323)
NUMBER IN GROUP	31	5	11	40	18	16	26	5
PERCENT OF TOTAL SAMPLE	2%	-	1%	2%	1%	1%	1%	-
PERCENT IN CONUS	93%	100%	100%	95%	100%	86%	69%	40%
PERCENT OVERSEAS	3%	-	-	5%	-	13%	31%	60%
DAFSC DISTRIBUTION								
42330	16	20	-	-	-	-	4	-
42350	71	40	91	35	11	69	19	20
42370	13	40	9	65	89	31	73	80
AVERAGE GRADE	E-4	E-4	E-4	E-6	E-6	E-5	E-6	E-6
AVERAGE TICF	47	66	52	136	171	82	157	181
AVERAGE TAFMS	59	76	56	144	80	88	174	196
PERCENT IN FIRST-ENLISTMENT	45%	40%	45%	15%	-	38%	45%	-
AVG NUMBER OF TASKS PERFORMED	36	65	39	22	29	19	14	15
JOB DIFFICULTY INDEX (JDI)(AVERAGE JDI = 13.0)		6.2	10.4	7.3	11.1	11.4	10.0	7.5 7.4

TABLE 6

COMPARISON OF JOB SATISFACTION INDICATORS FOR CAREER LADDER SPECIALTY JOB GROUPS

	FLIGHTLINE MAINT CLUSTER (GRP260)	FLIGHTLINE POMO PERS SUBCLUSTER (GRP382)	DEPOT-LEVEL MAINT PERS (GRP612)	SHIFT SUPERVISORS (GRP499)	OJT TRAINERS (GRP478)	FLIGHTLINE NON-POMO PERSONNEL SUBCLUSTER (GRP399)	LINE SUPERVISORS (GRP533)	FTD TRAINERS (GRP466)
EXPRESSED JOB INTEREST:								
DULL	6	8	-	6	20	4	2	-
SO-SO	14	15	20	17	20	11	16	-
INTERESTING	79	78	60	78	60	82	82	100
PERCEIVED UTILIZATION OF TALENTS:								
LITTLE OR NOT AT ALL	16	18	-	17	40	12	15	-
FAIRLY WELL TO PERFECTLY	84	81	100	83	60	87	85	86
PERCEIVED UTILIZATION OF TRAINING:								
LITTLE OR NOT AT ALL	16	18	-	33	40	12	12	-
FAIRLY WELL TO PERFECTLY	84	82	100	67	60	87	89	100
SENSE OF ACCOMPLISHMENT FROM JOB:								
DISSATISFIED	12	12	-	22	20	11	10	-
SO-SO	9	11	-	11	20	8	8	-
SATISFIED	78	78	100	67	60	80	82	100
REENLISTMENT INTENTIONS:								
PLAN TO RETIRE	2	3	-	6	-	2	3	-
NO, OR PROBABLY NO	28	31	20	-	20	23	7	14
YES, OR PROBABLY YES	70	66	80	94	80	74	89	86

TABLE 6 (CONTINUED)

COMPARISON OF JOB SATISFACTION INDICATORS FOR CAREER LADDER SPECIALTY JOB GROUPS

	SHIFT SUPERVISORS (GRP407)	MAC GEN FLIGHTLINE MAINT PERS (GRP468)	ADV RECON ACFT MAINT PERSONNEL (GRP416)	BASIC ACFT ELEC SYS MAINT PERS SUBCLUSTER (GRP349)	C-5A ACFT SYS MAINT SPECIALISTS (GRP326)	BATTERY SHOP CLUSTER (GRP091)	TRANSIENT AIRCRAFT MAINT PERS IJT (GRP346)
EXPRESSED JOB INTEREST:							
DULL	-	4	-	12	20	18	2
SO-SO	13	19	-	16	40	11	15
INTERESTING	88	77	100	70	40	69	79
PERCEIVED UTILIZATION OF TALENTS:							
LITTLE OR NOT AT ALL	-	19	-	21	60	33	13
FAIRLY WELL TO PERFECTLY	100	81	100	80	40	68	85
PERCEIVED UTILIZATION OF TRAINING:							
LITTLE OR NOT AT ALL	-	15	-	25	20	26	18
FAIRLY WELL TO PERFECTLY	100	85	100	74	80	74	80
SENSE OF ACCOMPLISHMENT FROM JOB:							
DISSATISFIED	13	4	-	21	40	25	22
SO-SO	13	8	-	7	20	11	22
SATISFIED	75	86	100	73	20	64	56
REENLISTMENT INTENTIONS:							
PLAN TO RETIRE	-	-	-	-	-	1	-
NO, OR PROBABLY NO	38	31	17	36	60	41	67
YES, OR PROBABLY YES	63	69	83	64	40	56	33

TABLE 6 (CONTINUED)

COMPARISON OF JOB SATISFACTION INDICATORS FOR CAREER LADDER SPECIALTY JOB GROUPS

	TROUBLE-SHOOTING MAINTENANCE CLUSTER (GRP249)	FLIGHTLINE TROUBLE-SHOOTING PERSONNEL SUBCLUSTER (GRP358)	GEN ELEC SYS MAINT & TROUBLE-SHOOTING PERS SUBCLUSTER (GRP296)	AVIONICS MAINT SPECIALISTS IJT (GRP294)	TROUBLE-SHOOTING AND INSPECTION CLUSTER (GRP199)	OS OV-10 MAINT PERSONNEL IJT (GRP384)	LOGISTICS SUPPORT SPECIALISTS IJT (GRP387)	LIGHTING AND ANTI-SKID CII SPECIALISTS IJT (GRP305)
EXPRESSED JOB INTEREST:								
DULL	9	8	10	20	13	-	-	20
SO-SO	17	17	20	20	20	40	30	-
INTERESTING	74	74	70	60	67	60	70	80
PERCEIVED UTILIZATION OF TALENTS:								
LITTLE OR NOT AT ALL	21	18	30	40	23	-	-	20
FAIRLY WELL TO PERFECTLY	79	81	70	60	77	100	100	80
PERCEIVED UTILIZATION OF TRAINING:								
LITTLE OR NOT AT ALL	15	15	10	-	23	40	-	20
FAIRLY WELL TO PERFECTLY	85	85	90	100	77	60	100	80
SENSE OF ACCOMPLISHMENT FROM JOB:								
DISSATISFIED	15	15	15	20	23	20	10	-
SO-SO	10	8	15	-	70	-	10	60
SATISFIED	75	77	70	80	57	80	80	40
REENLISTMENT INTENTIONS:								
PLAN TO RETIRE	1	1	-	-	10	-	-	-
NO, OR PROBABLY NO	35	34	45	60	27	20	30	20
YES, OR PROBABLY YES	62	63	55	40	63	80	70	80

TABLE 6 (CONTINUED)

COMPARISON OF JOB SATISFACTION INDICATORS FOR CAREER LADDER SPECIALTY JOB GROUPS

	IN-SHOP MAINT CLUSTER (GRP224)	POMO/FTR MAINT PERS SUBCLUSTER (GRP252)	TNG CEN TEST EQUIP MAINT PERS (GRP517)	BENCH CHECKING SPECIALISTS (GRP381)	NON-POMO MAINT & INSP PERSONNEL SUBCLUSTER (GRP254)	BATTERY MAINT SPECIALISTS (GRP317)	LINE QC PERSONNEL IJT (GRP233)
EXPRESSED JOB INTEREST:							
DULL	9	9	-	40	13	17	40
SO-SO	16	18	17	7	6	17	-
INTERESTING	75	73	83	53	81	67	60
PERCEIVED UTILIZATION OF TALENTS:							
LITTLE OR NOT AT ALL	20	23	17	47	9	17	40
FAIRLY WELL TO PERFECTLY	80	77	83	53	91	83	60
PERCEIVED UTILIZATION OF TRAINING:							
LITTLE OR NOT AT ALL	18	18	-	33	19	17	40
FAIRLY WELL TO PERFECTLY	82	83	100	67	81	83	60
SENSE OF ACCOMPLISHMENT FROM JOB:							
DISSATISFIED	20	19	17	40	22	17	40
SO-SO	7	6	17	-	13	-	-
SATISFIED	73	74	68	60	66	83	60
REENLISTMENT INTENTIONS:							
PLAN TO RETIRE	2	3	-	7	-	-	0
NO, OR PROBABLY NO	29	26	67	47	38	33	20
YES, OR PROBABLY YES	68	70	33	43	63	67	80

TABLE 6 (CONTINUED)

COMPARISON OF JOB SATISFACTION INDICATORS FOR CAREER LADDER SPECIALTY JOB GROUPS

	SUPERVISORY CLUSTER (GRP098)	LINE & SHOP NCOICs (GRP308)	BRANCH & SR NCOICs (GRP165)	SPECIALIST FLIGHTLINE SUPERVISORS (GRP123)	QC INSPECTORS CLUSTER (GRP094)	FTD INSTRUCTORS & INSPECTORS (GRP421)
EXPRESSED JOB INTEREST:						
DULL	15	18	15	11	5	-
SO-SO	10	16	-	14	25	-
INTERESTING	74	67	86	74	70	100
PERCEIVED UTILIZATION OF TALENTS:						
LITTLE OR NOT AT ALL	17	20	12	20	25	-
FAIRLY WELL TO PERFECTLY	81	80	83	80	75	100
PERCEIVED UTILIZATION OF TRAINING:						
LITTLE OR NOT AT ALL	24	29	17	26	5	-
FAIRLY WELL TO PERFECTLY	75	69	83	74	95	100
SENSE OF ACCOMPLISHMENT FROM JOB:						
DISSATISFIED	23	28	22	20	15	-
SO-SO	11	16	2	14	10	-
SATISFIED	66	57	76	66	75	100
REENLISTMENT INTENTIONS:						
PLAN TO RETIRE	19	28	15	11	10	40
NO, OR PROBABLY NO	15	14	12	20	15	-
YES, OR PROBABLY YES	67	59	73	69	75	60

TABLE 6 (CONTINUED)

COMPARISON OF JOB SATISFACTION INDICATORS FOR CAREER LADDER SPECIALTY JOB GROUPS

	DEPOT LVL MAINT CLUSTER (GRP065)	SOLID-STATE COMPONENT & TEST EQUIP MAINT PERS (GRP207)	GEN ACFT ELEC SYS MAINT PERSONNEL (GRP261)	TRAINER CLUSTER (GRP029)	FTD INSTRUCTORS (GRP073)	IN-RES TRAINING INSTRUCTORS (GRP120)	MAINT CONTR & SCHED CLUSTER (GRP015)	SCHEDULERS (GRP323)
EXPRESSED JOB INTEREST:								
DULL	10	-	9	5	-	13	-	-
SO-SO	23	20	36	15	6	25	12	-
INTERESTING	65	60	55	80	94	63	89	100
PERCEIVED UTILIZATION OF TALENTS:								
LITTLE OR NOT AT ALL	26	20	36	15	-	31	12	20
FAIRLY WELL TO PERFECTLY	74	80	64	85	100	69	89	80
PERCEIVED UTILIZATION OF TRAINING:								
LITTLE OR NOT AT ALL	42	60	46	15	-	25	27	60
FAIRLY WELL TO PERFECTLY	58	40	55	85	100	75	73	40
SENSE OF ACCOMPLISHMENT FROM JOB:								
DISSATISFIED	29	40	27	18	6	31	15	40
SO-SO	7	20	9	3	-	-	19	-
SATISFIED	65	40	64	80	94	69	65	60
REENLISTMENT INTENTIONS:								
PLAN TO RETIRE	-	-	-	13	17	-	27	40
NO, OR PROBABLY NO	39	20	27	15	-	31	8	-
YES, OR PROBABLY YES	61	80	73	70	78	69	62	60

ANALYSIS OF DAFSC GROUPS

An analysis of DAFSC groups, in conjunction with the analysis of the career ladder structure, is an important part of each occupational survey. The DAFSC analysis compares the skill levels to highlight any differences in the tasks performed. This information is especially helpful in evaluating career ladder documents such as the AFR 39-1 Specialty Description and the Specialty Training Standard (STS), as well as to help determine potential training needs.

A comparison of duty and task performance between 3- and 5-skill level personnel indicates the jobs they perform are essentially the same. This is consistent with the common AFR 39-1 Specialty Description; therefore, they will be discussed as one group (42330/42350) in this report. The distribution of skill-level groups across the career ladder specialty jobs is shown in Table 7. To give a sense of the progression through the skill levels, the relative time spent on each duty by skill-level group is presented in Table 8.

As can be seen from the tables and discussion previously mentioned in this report, as an individual progresses through the skill level structure, the more supervisory and administrative responsibilities are assumed. Also, in this progression, there is a decline in the amount of time spent performing technical duties. In the discussion of the skill levels below, please reference the listing of representative tasks performed and selected background information for each DAFSC group given in Appendix B.

TABLE 7

DISTRIBUTION OF DAFSC GROUP MEMBERS ACROSS CAREER LADDER CLUSTERS AND INDEPENDENT JOB TYPES (PERCENT MEMBERS PERFORMING)*

JOB GROUPS	DAFSC 42330/42350 (N=1,324)	DAFSC 42370 (N=487)
I. BATTERY SHOP CLUSTER (GRP091, N=80)	6	1
II. FLIGHTLINE MAINTENANCE CLUSTER (GRP260, N=815)	45	46
III. TRANSIENT AIRCRAFT MAINTENANCE PERSONNEL (GRP346, N=61)	4	3
IV. TROUBLESHOOTING AND MAINTENANCE CLUSTER (GRP249, N=200)	14	4
V. AVIONICS MAINTENANCE SPECIALISTS (GRP294, N=5)	-	-
VI. IN-SHOP MAINTENANCE CLUSTER (GRP224, N=142)	10	3
VII. TROUBLESHOOTING AND INSPECTION CLUSTER (GRP199, N=30)	2	1
VIII. OVERSEAS OV-10 MAINTENANCE PERSONNEL (GRP384, N=5)	-	-
IX. LOGISTICS SUPPORT SPECIALISTS (GRP387, N=10)	-	-
X. LIGHTING AND ANTI-SKID CIRCUIT SPECIALISTS (GRP305, N=5)	-	-
XI. SUPERVISORY CLUSTER (GRP098, N=129)	2	20
XII. QUALITY CONTROL INSPECTORS CLUSTER (GRP094, N=20)	-	3
XIII. DEPOT LEVEL MAINTENANCE (GRP065, N=31)	2	1
XIV. LINE QUALITY CONTROL PERSONNEL (GRP233, N=5)	-	-
XV. TRAINER CLUSTER (GRP029, N=40)	1	5
XVI. MAINTENANCE CONTROL AND SCHEDULING CLUSTER (GRP015, N=26)	-	4
TOTAL	86	92

- Denotes less than 1 percent
* Percent members within each specialty or independent job type
** Total does not equal 100 percent due to no response, rounding error, or not being grouped

TABLE 8

AVERAGE PERCENT TIME SPENT PERFORMING DUTIES BY DAFSC GROUPS*

DUTIES	TOTAL SAMPLE (N=1,814)	DAFSC 423X0 (N=187)	DAFSC 42350 (N=1,137)	DAFSC 42370 (N=487)
A. ORGANIZING AND PLANNING	2	-	1	5
B. DIRECTING AND IMPLEMENTING	5	1	3	11
C. INSPECTING AND EVALUATING	3	-	1	7
D. TRAINING	4	-	3	8
E. PREPARING FORMS, RECORDS, OR REPORTS	9	9	9	9
F. MAINTAINING SOLID-STATE COMPONENTS	1	1	1	-
G. PERFORMING QUALITY CONTROL OR QUALITY ASSURANCE FUNCTIONS	4	4	4	5
H. INSPECTING AIRCRAFT ELECTRICAL CIRCUIT COMPONENTS	17	17	17	15
I. ISOLATING MALFUNCTIONS ON AIRCRAFT ELECTRICAL SYSTEMS	21	20	23	17
J. PERFORMING BENCH CHECKS ON CONVENTIONAL COMPONENTS	4	5	4	2
K. MAINTAINING AIRCRAFT ELECTRICAL SYSTEMS	29	38	32	18
L. MAINTAINING TEST EQUIPMENT	2	2	2	2

* Columns may not add to 100 percent due to rounding
- Less than 1 percent

Skill-Level Descriptions

DAFSCs 42330/42350. The 1,324 3-/5-skill level personnel (73 percent of the total sample) perform an average of 87 tasks. Performing a mostly technical job, members spent most of their work time doing flightline, troubleshooting, and in-shop maintenance activities. About 14 percent of this group hold a 3-skill level, while the rest hold a 5-skill level. Sixty-two percent are in their first enlistment and their computed JDI is 12.3, which is very close to the standardized average of 13.0. All of the job satisfaction indicators are high, with the exception of reenlistment intention, which is somewhat lower than the 42370s report.

DAFSC 42370. About 27 percent of the total sample hold a 7-skill level, which amounts to about 487 personnel. They are performing an average of 104 tasks and have a JDI of 15.1, reflecting the expanded supervisory responsibilities of these senior personnel. While the group is still performing the technical aspects of the job, they are spending an increasing amount of time on the supervising, administering, directing, and training of the 42330/42350 personnel. Job satisfaction indicators for this group are all high, except the satisfaction with sense of accomplishment indicator, which indicates a slightly lower satisfaction level than the 42330/42350 personnel.

Summary

Career ladder progression through the skill levels is well defined, with the 3- and 5-skill level personnel spending the majority of their job time performing the general maintenance duties of the career field. The 7-skill level personnel are spending more time doing supervisory duties and less time performing the technical aspects of the job.

ANALYSIS OF AFR 39-1 SPECIALTY DESCRIPTIONS

The foregoing 3-, 5-, and 7-skill level survey data were compared to the AFR 39-1 Specialty Descriptions for the Aircraft Electrical Systems Specialist (AFSCs 42310, 42330, and 42350) and the Aircraft Electrical Systems Technician (AFSC 42370), dated 1 January 1982. These descriptions are intended to give a broad overview of the duties and tasks performed by each skill level of the career ladder.

Based on the preceding DAFSC analysis, the 3- and 5-skill level description appears complete and accurately reflects the broad range of duties and responsibilities of these personnel. The 7-skill level description also appears to be complete and accurate, indicating not only the supervisory responsibilities, but the technical aspects of the job as well. Specialty qualifications, in terms of knowledge, experience, and training, also appear to be appropriate and complete in both descriptions.

ANALYSIS OF TAFMS GROUPS

By reviewing the utilization patterns, based on Total Active Federal Military Service (TAFMS), we can begin to see how responsibilities, jobs, and tasks change over the course of time. As is typical with most career ladders (the 423X0 is no exception), as time in service and experience increase, there is a corresponding increase in the performance of duties involving supervisory, managerial, and training tasks. On the other hand, as time spent on supervisory and administrative duties increases, the time spent on technical tasks, as well as the number of technical tasks performed, generally tapers off. This general trend of shift in the time spent performing the various duties is well illustrated in Table 9. These changes in responsibilities which occur over time are consistent with the changes mentioned in the DAFSC analysis section.

First-Enlistment Personnel

There are 821 first-enlistment personnel (1-48 months) in the total sample, or 45 percent of the surveyed personnel. They spend the majority of their time performing the general maintenance tasks associated with aircraft electrical systems. Three-quarters of their time is spent maintaining, isolating, and inspecting aircraft electrical systems. They perform an average of 86 tasks, with most of them grouped in the specialty jobs that are performing most of the technical work in the 423X0 career field. (Appendix C provides a listing of representative tasks performed by the three TAFMS groups, as well as some selected background information). The distribution of first-term airmen across job group specialties is illustrated in Figure 2.

Job Satisfaction

Comparisons of group attitudes toward their jobs help career field managers understand some of the factors which may affect the job performance of the 423X0 airmen. These data were gathered through five inventory questions covering job interest, perceived utilization of talents and training, sense of accomplishment, and reenlistment intentions. Table 10 presents this data along with the same information from comparative samples of maintenance AFSCs surveyed in 1983. On every measure, the degree of satisfaction is essentially the same for the 423X0 career field and the comparative sample.

TABLE 9

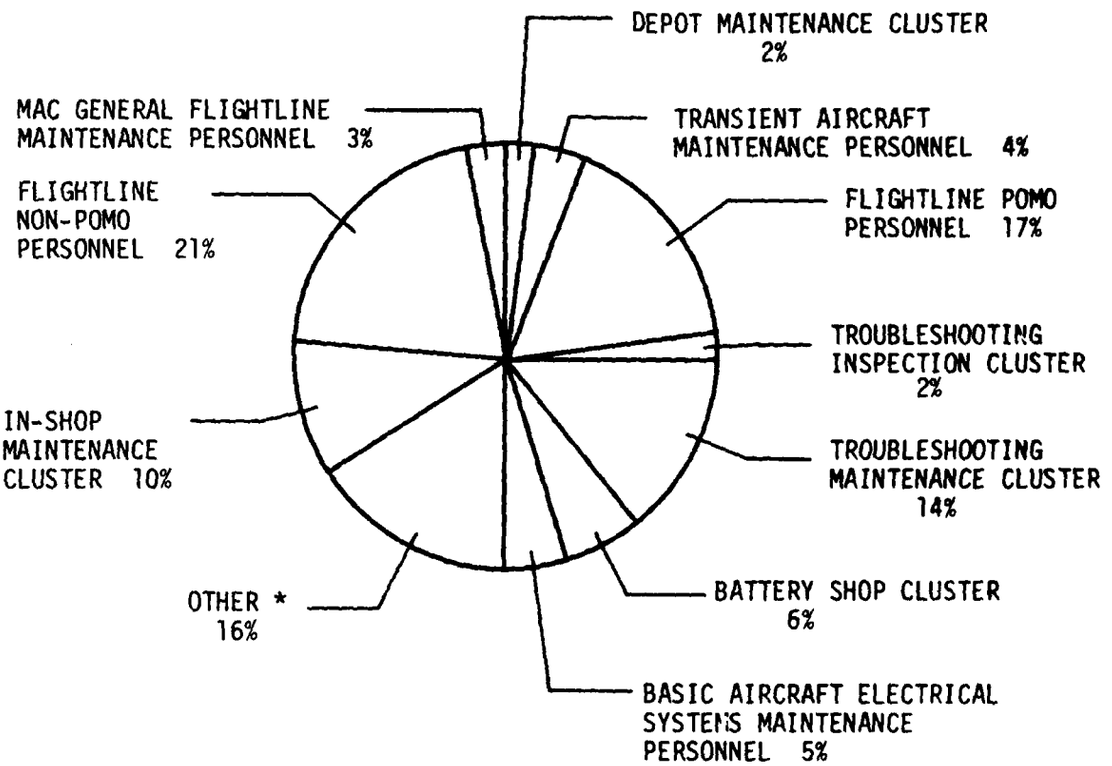
PERCENT TIME SPENT PERFORMING DUTIES BY 423X0 TAFMS GROUPS*

DUTIES	1-48 (N=821)	49-96 (N=503)	97+ (N=490)
MANAGERIAL AND ADMINISTRATIVE			
A. ORGANIZING AND PLANNING	-	2	5
B. DIRECTING AND IMPLEMENTING	1	4	11
C. INSPECTING AND EVALUATING	-	2	7
D. TRAINING	1	4	8
E. PREPARING FORMS, RECORDS, OR REPORTS	8	9	9
TECHNICAL			
F. MAINTAINING SOLID-STATE COMPONENTS	2	1	-
G. PERFORMING QUALITY CONTROL OR QUALITY ASSURANCE FUNCTIONS	3	4	5
H. INSPECTING AIRCRAFT ELECRICAL CIRCUIT COMPONENTS	18	16	15
I. ISOLATING MALFUNCTIONS ON AIRCRAFT ELECTRICAL SYSTEMS	24	22	16
J. PERFORMING BENCH CHECKS ON CONVENTIONAL COMPONENTS	5	3	2
K. MAINTAINING AIRCRAFT ELECTRICAL SYSTEMS	34	29	18
L. MAINTAINING TEST EQUIPMENT	2	2	2

* Columns may not add to 100 percent due to rounding
- Less than 1 percent

FIGURE 2

DISTRIBUTION OF 423X0 FIRST-ENLISTMENT PERSONNEL
IN CAREER LADDER JCBS
(N=821)



* REPRESENTS JOB GROUPS WITH LESS THAN 1% AND FIRST-ENLISTMENT PERSONNEL NOT GROUPED IN THE JOB SPECIALTY GROUPS

TABLE 10

COMPARISON OF JOB SATISFACTION INDICATORS BY TAFMS GROUPS (PERCENT MEMBERS RESPONDING)*

	1-48 MONTHS TAFMS		49-96 MONTHS TAFMS		97+ MONTHS TAFMS	
	423X0 (N=821)	COMPARATIVE SAMPLE** (N=3,206)	423X0 (N=503)	COMPARATIVE SAMPLE** (N=1,447)	423X0 (N=490)	COMPARATIVE SAMPLE** (N=2,220)
EXPRESSED JOB INTEREST						
DULL	11	10	10	12	9	7
SO-SO	16	19	14	15	14	12
INTERESTING	72	70	75	72	76	79
PERCEIVED UTILIZATION OF TALENTS						
LITTLE OR NOT AT ALL	21	20	20	19	19	15
FAIRLY WELL TO PERFECTLY	79	79	79	81	80	85
PERCEIVED UTILIZATION OF TRAINING						
LITTLE OR NOT AT ALL	16	20	23	22	19	19
FAIRLY WELL TO PERFECTLY	83	78	76	77	80	81
REENLISTMENT INTENTIONS						
PLAN TO RETIRE	-	-	-	-	14	19
NO OR PROBABLY NO	41	46	26	29	9	8
YES OR PROBABLY YES	55	53	72	70	76	72

* Columns may not equal 100 percent due to no response or rounding
** Comparative sample included Mission Equipment Maintenance career ladders surveyed in 1983 AFSCs include: 305X4, 324X0, 328X5, 423X1, 423X5, 464X0

\- Less than 1 percent

TRAINING ANALYSIS

Information gathered with the occupational survey is also used to assist in the development or evaluation of training programs that are relevant for personnel working in their first assignment. Some factors which may be used in the analysis include percent of first job (1-24 months TAFMS) or first-enlistment (1-48 months TAFMS) personnel performing tasks, along with training emphasis (TE) and task difficulty (TD) ratings (as explained in the Task Factor Administration section). These factors were used in evaluating the 423X0 STS and the POI for Course 3ABR42330, based on the matching of inventory tasks to appropriate sections of the STS and POI by technical school personnel from the Chanute Technical Training Center, Chanute AFB IL. A complete computer listing displaying the percent members performing, TE and TD ratings for each task, along with STS and POI matchings, has been forwarded to the technical school for use in further detailed reviews of training documents. A summary of that information is given below.

Training Emphasis

Training emphasis (TE) ratings are helpful in determining which tasks are most important for first-enlistment training. The top 20 tasks rated by senior aircraft electrical system personnel as highest in importance for first-enlistment training are listed in Table 11. In all, 98 tasks were given high TE ratings. When matched to training documents, such as the STS and POI, TE ratings can be helpful in determining tasks on which personnel should be trained. Some of these tasks will be discussed in a review of the POI later in this section.

TABLE 11

EXAMPLES OF TASKS RATED HIGH FOR TRAINING EMPHASIS

TASKS NOT REFERENCED		TRAINING EMPHASIS*	PERCENT MEMBERS PERFORMING 1ST JOB	PERCENT MEMBERS PERFORMING 1ST ENLISTMENT	TASK DIFFICULTY**
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	7.06	83	85	2.79
I239	ISOLATE MALFUNCTIONS ON AIRCRAFT AC POWER DISTRIBUTION CIRCUITS	7.02	71	74	6.69
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	7.00	83	82	2.89
K439	CRIMP WIRES TO SPLICES AND TERMINALS	6.92	80	80	2.65
E105	MAKE ENTRIES ON AFTO FORMS 781 (AEROSPACE VEHICLE FLIGHT DATA DOCUMENT)	6.78	55	57	3.26
I234	ISOLATE MALFUNCTIONS ON AC GENERATOR SYSTEMS	6.74	71	74	6.68
K454	PERFORM SOLDERLESS CONNECTOR INSERTIONS OR EXTRACTIONS	6.71	62	64	4.39
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	6.67	74	77	5.36
K475	REMOVE OR INSTALL CONNECTOR PLUGS	6.67	82	82	4.20
K525	REWIRE AIRCRAFT ELECTRICAL SYSTEMS	6.65	65	67	6.44
I243	ISOLATE MALFUNCTIONS ON ANTI-SKID CIRCUITS	6.55	66	68	5.96
I258	ISOLATE MALFUNCTIONS ON CONSTANT SPEED DRIVE (CSD) CIRCUITS	6.47	42	50	6.37
I290	ISOLATE MALFUNCTIONS ON LANDING GEAR CONTROL AND WARNING CIRCUITS	6.45	71	74	6.58
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	6.45	71	74	5.09
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	6.35	71	72	4.36
I240	ISOLATE MALFUNCTIONS ON AIRCRAFT DC POWER DISTRIBUTION CIRCUITS	6.31	67	71	6.12
K401	ASSEMBLE OR DISASSEMBLE CONNECTOR PLUGS	6.25	68	70	4.37
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	6.18	80	80	3.97
H160	INSPECT AIRCRAFT BATTERIES	6.14	55	52	3.74
H197	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	6.10	66	68	4.94

* Average training emphasis is 2.6; a high TE rating is 4.2
** Average task difficulty is 5.00; with a standard deviation of 1.00

Analysis of the Specialty Training Standard (STS)

A comprehensive review of STS 423X0, dated August 1982, compared STS paragraphs and subparagraphs to the occupational survey data. STS elements containing general information or subject-matter knowledge requirements were not evaluated. Due to the emphasis in the STS on learning electrical theory and the general principles of electronics and electrical systems, there are a number of general elements not evaluated. The wide variety of aircraft maintained results in the general requirements for a 3-level, and necessitates the follow-on training received at field training detachment (FTD) courses for each assigned aircraft.

The elements listed in the STS with tasks referenced to them were adequately supported in terms of being performed by a substantial percent of the career field. Most of the tasks not referenced to the STS are low in both percent members performing or in training emphasis ratings. Those tasks that were not matched and have at least 20 percent members performing or a high training emphasis, or both, are listed below:

make entries on AGE forms such as nonpowered record forms
conduct OJT
isolate malfunctions of anti-ice or deice electrical control and warning circuits
inspect electrically operated hydraulic pump circuit components
isolate malfunctions on engine anti-icing control and warning circuits
isolate malfunctions on galley or latrine electrical circuits

These tasks should be considered for inclusion in the next revision of the STS. The STS and the task matchings given by subject-matter specialists are, on the whole, appropriate and appear to be correct.

POI Analysis

A similar match of the survey data to the POI for Course 3ABR42330 shows that most blocks with tasks matched to them are well supported by the survey data. Based on the previously mentioned assistance from subject-matter specialists in matching inventory tasks to the POI, computer products were generated displaying the results of the matching process. Information on these products include TE and TD ratings and percent members performing the tasks for first-job (1-24 months TAFMS) and first-enlistment (1-48 months TAFMS) personnel.

As in the STS analysis, the POI has a number of instruction blocks that have no tasks referenced to them because of their general nature (i.e., basic theory, electrical systems, or electronics principles). Table 12 gives examples of tasks not referenced to the POI that were high in training emphasis and had 30 percent or more members performing. These tasks should be considered by subject-matter specialists for inclusion in the POI. It must be noted again that there are FTD follow-on courses and vigorous OJT programs for almost every different aircraft. This has a direct effect on the orienting of the POI towards general information and not on specific maintenance tasks.

Summary

Overall, the STS match to the survey data appeared appropriate. The POI was well supported in those modules that had tasks referenced to them; however, a large number of tasks that were not referenced to the POI should be considered for inclusion in Course 3ABR42330. Finally, the 423X0 personnel report they are well trained after completion of follow-on training and that their training is being well utilized on the job. Unlike the in-residence course, FTD documentation does not allow a comparison of what should be taught to what is actually being taught. Thus, the problem seems to be a matter of documentation. Somewhere in the process, Aircraft Electrical Systems Trainers are providing the training that is needed, but it is difficult to evaluate how cost-efficient this training is in terms of factors such as time spent giving the training and possible duplication of training between the resident course and FTDs. Survey data should provide a useful basis for improvement of training documentation, as well as evaluation of FTD training by personnel familiar with each specific FTD course. A better coordination between training communities appears to be a necessary condition for increased efficiency in training the Aircraft Electrical Systems personnel.

TABLE 12

EXAMPLES OF TASKS NOT REFERENCED TO POI 3ABR42330

TASKS NOT REFERENCED		TRAINING EMPHASIS*	PERCENT MEMBERS PERFORMING 1ST JOB	PERCENT MEMBERS PERFORMING 1ST ENLISTMENT	TASK DIFFICULTY**
K454	PERFORM SOLDERLESS CONNECTOR INSERTIONS OR EXTRACTIONS	6.71	62	64	4.39
I258	ISOLATE MALFUNCTIONS OF CONSTANT SPEED DRIVE (CSD) CIRCUITS	6.47	42	50	6.37
H197	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	6.10	66	68	4.94
H163	INSPECT ALTERNATING CURRENT (AC) GENERATOR AND DISTRIBUTION SYSTEM CIRCUIT COMPONENTS	5.98	55	58	5.56
I246	ISOLATE MALFUNCTIONS ON BATTERY CHARGER SYSTEM CIRCUITS	5.90	44	46	4.98
I247	ISOLATE MALFUNCTIONS ON BATTERY DISTRIBUTION CIRCUITS	5.86	52	55	5.19
H212	INSPECT LANDING GEAR CONTROL AND WARNING CIRCUIT COMPONENTS	5.69	54	60	5.56
H164	INSPECT ANTI-SKID CIRCUIT COMPONENTS	5.61	51	52	5.13
I278	ISOLATE MALFUNCTIONS ON FUEL CONTROL AND WARNING CIRCUITS	5.43	39	45	5.92
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	5.43	78	78	2.22
H195	INSPECT EXTERNAL POWER SYSTEM CIRCUIT COMPONENTS	5.37	49	54	4.35
K455	PERFORM TCTO MODIFICATIONS OF AIRCRAFT ELECTRICAL SYSTEMS	5.29	68	70	5.76
H208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	5.26	62	65	3.82
K456	POT CONNECTORS OR RELAYS	5.26	42	44	3.22
K194	INSPECT EXTERIOR LIGHTING CIRCUIT COMPONENTS	5.22	63	65	3.61
K523	REPLACE MICRO SWITCHES	5.22	56	60	4.00
H162	INSPECT AIRCRAFT FLIGHT CONTROL CIRCUIT COMPONENTS	5.16	35	39	5.72
G155	PERFORM SPECIAL INSPECTIONS OF AIRCRAFT ELECTRICAL SYSTEMS	5.14	41	47	5.57
H178	INSPECT CONSTANT SPEED DRIVE (CSD) CIRCUIT COMPONENTS	5.14	34	39	5.49
K441	FABRICATE COMPACT WIRE BUNDLES	5.10	32	33	5.35
K458	REMOVE OR INSTALL ANTI-SKID CIRCUIT COMPONENTS	5.10	68	67	4.08

* Average training emphasis is 2.6; high TE rating is 4.2

** Average task difficulty is 5.00; standard deviation of 1.00

ANALYSIS OF CONUS-OVERSEAS GROUPS

Comparisons were made of the tasks performed and background data between 862 5-skill level personnel assigned within the continental United States (CONUS) and 262 airmen assigned overseas.

No major differences in the utilization of these groups were found. They were virtually equal in terms of job difficulty (with a JDI of 13.0 for both groups) and average number of tasks performed (CONUS members performed eight more). On the whole, the only differences were trends in job satisfaction indicators and test equipment used. The overseas group consistently rated job satisfaction slightly lower than the CONUS group, while the CONUS group consistently reported using test equipment to a slightly greater extent than the overseas group. Appendix D shows representative tasks for both groups listed in descending order of percent members performing. Table 13 shows the comparison of satisfaction indicators between CONUS and overseas personnel holding a 5-skill level. There are no practical differences between the two groups.

MAJCOM ANALYSIS

Another area of analysis involves examining duty and task performance across major commands (MAJCOM). The differences were relatively minor and were associated with the type of aircraft. The tactical forces (TAC, USAFE, PACAF, and AAC) were all similar in the tasks performed due to the type of aircraft maintained. Likewise, MAC and SAC were very much the same due to the "heavy" aircraft they maintain. The only command significantly different was ATC due to the assignment of many career field trainers; thus, a lot of time was spent on training duties and tasks. Use of first-term personnel across the MAJCOMs was also analyzed. Here, there was even less difference across commands than the minor variations mentioned above for major commands as a whole.

In summary, there were some minor differences due to the type of aircraft assigned to each of the MAJCOMs, except ATC with their unique training mission. A tremendous amount of time spent on similar tasks by the whole career field illustrates the relatively consistent nature of the 423X0 career ladder.

TABLE 13

COMPARISON OF JOB SATISFACTION INDICATORS BY CONUS AND OVERSEAS GROUPS
(Percent Members Performing)

	CONUS 42350 (N=862)	OVERSEAS 42350 (N=262)
EXPRESSED JOB INTEREST		
DULL	10	16
SO-SO	17	16
INTERESTING	72	67
PERCEIVED UTILIZATION OF TALENTS		
LITTLE OR NOT AT ALL	21	24
FAIRLY WELL TO PERFECTLY	79	75
PERCEIVED UTILIZATION OF TRAINING		
LITTLE OR NOT AT ALL	19	22
FAIRLY WELL TO PERFECTLY	80	78
REENLISTMENT INTENTIONS		
PLAN TO RETIRE	-	2
NO OR PROBABLY NO	35	33
YES OR PROBABLY YES	62	60

* Columns may not add to 100 percent due to no response or rounding

- Less than 1 percent

COMPARISON TO PREVIOUS SURVEY

The results of this survey report were compared with the previous Occupational Survey Report (OSR) of the 423X0 career ladder, dated January 1979, to determine if there were any changes in the jobs performed or the overall satisfaction of the Aircraft Electrical Systems career field.

The current job structure analysis (Figure 1) was compared to the job structure identified in the previous OSR. It should be noted that the 1979 survey included DAFSC 42399 personnel; the 1984 did not. The following six clusters were identified in the 1979 report:

I. AIRCRAFT ELECTRICIANS (N=1723)

II. QUALITY CONTROL PERSONNEL (N=40)

III. BATTERY SHOP PERSONNEL (N=79)

IV. AIRCRAFT ELECTRICAL SYSTEMS MANAGEMENT PERSONNEL (N=218)

V. COMBAT LOGISTICS SUPPORT SPECIALISTS (N=23)

VI. AIRCRAFT ELECTRICAL SYSTEMS INSTRUCTORS (N=35)

As can be readily seen, this report is a much more detailed look at the 423X0 career field. A comparison illustrating this point is shown in Table 14. There are some interesting parallels between the past and the present, especially in the battery shop, quality control, and FTD instructors. Missing in the last survey report is the in-shop maintenance function and the transient aircraft maintenance group. These two job groups were probably part of the larger job groupings described by the previous OSR. There are also a number of small, independent job types in the current OSR that were not identified or addressed in the previous OSR.

Job satisfaction indicators between the past and current survey were also compared. The percent responding to each question are essentially the same (see Table 15). One notable exception is the reenlistment intent, with first enlistment having a 17 percent gain, the second enlistment with a 14 percent gain, and career personnel with an 8 percent gain. This increase is a reflection of a general Air Force-wide increase in reenlistment intentions. The only other significant difference is a dramatic increase in the job interest of the second enlistment personnel who indicate a much higher job interest (13 percent increase) in the current survey.

A comparison of the TAFMS, DAFSC, and MAJCOM sections revealed no significant differences between the two OSRs. There were some minor variations that were a result of the inclusion of DAFSC 42399 personnel in the 1979 OSR.

TABLE 14

JOB SPECIALTY COMPARISONS BETWEEN CURRENT AND PREVIOUS SURVEYS

1984 OSR	1979 OSR
BATTERY SHOP CLUSTER (N=80)	BATTERY SHOP PERSONNEL (N=79)
FLIGHTLINE MAINTENANCE CLUSTER (N=815), AND TROUBLESHOOTING MAINTENANCE CLUSTER (N=200)	AIRCRAFT ELECTRICIANS (N=1,723)
TRANSIENT AIRCRAFT MAINTENANCE PERSONNEL (N=61)	NI*
AVIONICS MAINTENANCE SPECIALISTS (N=5)	NI
IN-SHOP MAINTENANCE CLUSTER (N=142)	NI
TROUBLESHOOTING INSPECTION CLUSTER (N=30)	NI
OVERSEAS OV-10 MAINTENANCE PERSONNEL (N=5)	NI
LOGISTICS SUPPORT SPECIALISTS (N=10)	NI
LIGHTING AND ANTI-SKID CIRCUIT SPECIALISTS (N=5)	NI
SUPERVISORY CLUSTER (N=129), AND MAINTENANCE CONTROL AND SCHEDULING CLUSTER (N=26)	AIRCRAFT ELECTRICAL SYSTEMS MANAGEMENT PERSONNEL (N=218)
QUALITY CONTROL INSPECTORS CLUSTER (N=20), AND LINE QUALITY CONTROL PERSONNEL (N=5)	QUALITY CONTROL PERSONNEL (N=40)
DEPOT LEVEL MAINTENANCE (N=31)	COMBAT LOGISTICS SUPPORT SPECIALISTS (N=23)
TRAINER CLUSTER (N=40)	AIRCRAFT ELECTRICAL SYSTEMS INSTRUCTORS (N=35)

*NI = Not Identified

TABLE 15

COMPARISON OF PREVIOUS SURVEY AND CURRENT SURVEY 423X0 TAFMS GROUPS
(Percent Members Performing)

	1-48		49-96		97+	
	1979	1984	1979	1984	1979	1984
EXPRESSED JOB INTEREST						
DULL	9	11	12	10	7	9
SO-SO	19	16	23	14	11	14
INTERESTING	69	72	62	75	79	76
PERCEIVED UTILIZATION OF TALENTS						
LITTLE OR NOT AT ALL	22	21	22	20	13	19
FAIRLY WELL TO PERFECTLY	77	79	77	79	85	80
PERCEIVED UTILIZATION OF TRAINING						
LITTLE OR NOT AT ALL	21	16	24	23	14	19
FAIRLY WELL TO PERFECTLY	78	83	75	76	74	80
REENLISTMENT INTENTIONS						
PLAN TO RETIRE	-	-	-	-	-	-
NO OR PROBABLY NO**	60	41	40	26	31	23
YES OR PROBABLY YES	38	55	58	72	68	76

* Columns may not add to 100 percent due to rounding or no response
** Includes those who plan to retire

\- Less than 1 percent

IMPACT OF SOLID-STATE TECHNOLOGY

The impact of solid-state technology on the 423X0 career field was one of the original questions asked when this survey was requested. As can be seen in Table 16, there are very low percent members performing solid-state tasks--and these are the top 20 tasks. There are a few tasks in Table 16 that have a high training emphasis rating, which may indicate that training on these tasks should be given to first-term airmen, but most are low in both percent members performing and training emphasis ratings. Of all the specialty job groups, only one reported spending a significant portion of their time on solid-state tasks. The Solid-State Component and Test Equipment Maintenance Personnel in the Depot Level Maintenance Cluster spend 21 percent of their time performing solid-state tasks. This is significantly higher than any other group in the career field, and 20 percent more time spent than the 423X0 career field as a whole is spending on solid-state tasks. A listing of the top tasks performed by this job group is in Appendix A, Table A37.

In summary, there appears to be no signficant impact from the addition of solid-state technology to the Aircraft Electrical Systems career field at this time. Other than one specialty job group, which represents less than 1 percent of the career field, there is little maintenance of solid-state equipment or components being performed by the career field as a whole.

TABLE 16

PERCENT MEMBERS PERFORMING SOLID-STATE TASKS BY DAFSC

TASKS		423X0	42330	42350	42370	TNG EMP*
K453	PERFORM SOLDERING ON SOLID-STATE CIRCUIT BOARDS	21	19	23	18	4.22
K512	REMOVE OR INSTALL SOLID-STATE CIRCUIT BOARDS	15	15	16	15	3.06
F147	REMOVE OR INSTALL RESISTORS OR CAPACITORS ON SOLID-STATE CIRCUIT COMPONENTS	14	13	15	13	4.20
F117	BENCH CHECK AC GENERATORS WITH SOLID-STATE COMPONENTS	11	9	12	9	4.69
F115	BENCH CHECK AC CONTROL PANEL SOLID-STATE COMPONENTS	10	7	12	8	4.31
K513	REMOVE OR INSTALL SOLID-STATE COMPONENTS ON PRINTED CIRCUIT BOARDS	10	8	10	10	3.00
F143	ISOLATE MALFUNCTIONS WITHIN SOLID-STATE BRAKING CIRCUITS	9	5	9	10	3.47
F116	BENCH CHECK AC FREQUENCY AND LOAD CONTROLLERS WITH SOLID-STATE COMPONENTS	8	5	8	8	4.22
F139	INSPECT SOLID-STATE BRAKING CIRCUIT COMPONENTS	8	5	8	9	3.45
F141	INSPECT SOLID-STATE INVERTER CIRCUIT COMPONENTS	8	7	8	8	3.06
F145	ISOLATE MALFUNCTIONS WITHIN SOLID-STATE INVERTER SYSTEM CIRCUITS	8	6	8	8	2.84
F119	BENCH CHECK AC VOLTAGE REGULATOR SOLID-STATE COMPONENTS	7	6	8	5	4.45
F120	BENCH CHECK ANTI-SKID SOLID-STATE COMPONENTS	7	6	8	5	4.04
F118	BENCH CHECK AC POWER DISTRIBUTION SOLID-STATE COMPONENTS	6	5	6	5	4.04
F134	BENCH CHECK LANDING GEAR CIRCUIT SOLID-STATE COMPONENTS	6	6	7	3	3.61
F144	ISOLATE MALFUNCTIONS WITHIN SOLID-STATE CONVERTER CIRCUITS	6	3	6	5	2.49
F124	BENCH CHECK CONTINUOUS LOOP FIRE WARNING SOLID-STATE AMPLIFIER CONTROL BOXES	5	5	6	4	3.61
F136	BENCH CHECK OVERHEAT WARNING CIRCUIT SOLID-STATE COMPONENTS	5	6	6	2	3.94
J381	BENCH CHECK SOLID-STATE CIRCUIT BOARDS	5	4	5	5	2.74
F127	BENCH CHECK DC GENERATORS WITH SOLID-STATE COMPONENTS	5	4	6	3	3.12

* Average training emphasis rating is 2.63; High training emphasis rating is 4.24

IMPLICATIONS

The results of this occupational survey indicate the 423X0 career ladder is relatively consistent. The main specialty jobs group around technical functions, supervisory duties, and managerial responsibilities. First-term airmen are utilized in virtually all technical jobs and many are performing some supervisory duties as well. The commonality of aircraft electrical systems, coupled with the wide usage of first-term personnel across specialty jobs and the diversity of aircraft-specific variations, together suggest that common basic electrical and electronics training, followed by system-specific follow-on training, is appropriate. The current training structure is of this form and appears to support the needs of the career field; however, where the training is actually taking place is unclear. There is a tremendous amount of training being done in the follow-on courses, especially in FTDs, but no formal documentation is available for comparison to the basic resident course documents; therefore, it is difficult to know where the training is done and to what proficiency level airmen are being trained. Clear documentation of training given in follow-on courses would show where this training is being received, and also allow a comparison of the various structured training programs to see if there is a duplication of training. Finally, the impact of solid-state technology on the 423X0 career field is minimal, with few airmen performing solid-state related tasks.

Overall, the 423X0 career ladder is stable, organized effectively, and the proper training is apparently being received. The AFR 39-1 Specialty Descriptions appear to be accurate, job satisfaction indicators are positive, and reenlistment intentions are up for the career field as a whole. Apart from the issue of documentation of training and inclusion of some unmatched tasks in the STS and POI, there are no other major issues.

APPENDIX A

SELECTED REPRESENTATIVE TASKS PERFORMED BY CAREER LADDER STRUCTURE GROUPS

TABLE A1

GROUP ID NUMBER AND TITLE: GRP091 Battery Shop Cluster

GROUP SIZE: N=80 PERCENT OF SAMPLE: 4.4 %

AVERAGE GRADE: E-4 AVERAGE TICF: 33 Months

AVERAGE TAFMS: 47 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	91
K434	CLEAN NICKEL-CADMIUM BATTERIES	89
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	88
K408	ASSEMBLE OR DISASSEMBLE NICKEL-CADMIUM BATTERIES	86
H160	INSPECT AIRCRAFT BATTERIES	82
K473	REMOVE OR INSTALL CELLS ON NICKEL-CADMIUM BATTERIES	79
K433	CLEAN LEAD ACID BATTERIES	70
K439	CRIMP WIRES TO SPLICES AND TERMINALS	66
K476	REMOVE OR INSTALL CONNECTORS ON NICKEL-CADMIUM BATTERIES	61
E95	COMPLETE CONDITION TAGS AND LABELS	59
K475	REMOVE OR INSTALL CONNECTOR PLUGS	57
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	51
K401	ASSEMBLE OR DISASSEMBLE CONNECTOR PLUGS	51
K548	MAINTAIN BATTERY CHARGERS	50
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	50
J388	PERFORM CAPACITANCE TESTS OR SERVICES ON NICKEL-CADMIUM BATTERIES	47
E101	INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	44
K418	CLEAN CONNECTOR PLUGS	42
E104	MAKE ENTRIES ON AF FORMS 2005 (ISSUE/TURN IN REQUEST)	41
E98	COMPLETE SUPPLY FORMS OR PARTS REQUESTS	38
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	38
K454	PERFORM SOLDERLESS CONNECTOR INSERTIONS OR EXTRACTIONS	38
G150	INSPECT ELECTRICAL SYSTEMS FOR CORROSION	34
J387	PERFORM CAPACITANCE TESTS ON LEAD ACID BATTERIES	31
L527	INSPECT SHOP TEST EQUIPMENT OR TEST STANDS	29
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	27
K411	ASSEMBLE OR DISASSEMBLE ROTATING BEACONS	26
H167	INSPECT BATTERY CHARGER SYSTEM CIRCUIT COMPONENTS	26
E105	MAKE ENTRIES ON AFTO FORMS 781 (AEROSPACE VEHICLE FLIGHT DATA DOCUMENT)	25
K455	PERFORM TCTO MODIFICATIONS OF AIRCRAFT ELECTRICAL SYSTEMS	25
L535	ISOLATE MALFUNCTIONS ON BATTERY CHARGERS	24
K458	REMOVE OR INSTALL ANTI-SKID CIRCUIT COMPONENTS	24

TABLE A2

GROUP ID NUMBER AND TITLE: GRP260 Flightline Maintenance Cluster

GROUP SIZE: N=815 PERCENT OF SAMPLE: 45%

AVERAGE GRADE: E-4 AVERAGE TICF: 61 Months

AVERAGE TAFMS: 72 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	97
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	96
H197	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	96
I290	ISOLATE MALFUNCTIONS ON LANDING GEAR CONTROL AND WARNING CIRCUITS	95
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	95
I239	ISOLATE MALFUNCTIONS ON AIRCRAFT AC POWER DISTRIBUTION CIRCUITS	95
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	95
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	94
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	93
I234	ISOLATE MALFUNCTIONS ON AC GENERATOR SYSTEMS	93
H208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	93
K475	REMOVE OR INSTALL CONNECTOR PLUGS	93
H194	INSPECT EXTERIOR LIGHTING CIRCUIT COMPONENTS	92
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	92
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	92
H212	INSPECT LANDING GEAR CONTROL AND WARNING CIRCUIT COMPONENTS	92
I240	ISOLATE MALFUNCTIONS ON AIRCRAFT DC POWER DISTRIBUTION	89
K439	CRIMP WIRES TO SPLICES AND TERMINALS	89
H229	INSPECT WARNING LIGHT CIRCUIT COMPONENTS	88
I286	ISOLATE MALFUNCTIONS ON INTERNAL LIGHTING CIRCUITS	88
I271	ISOLATE MALFUNCTIONS ON EXTERNAL LIGHTING CIRCUITS	87
H163	INSPECT ALTERNATING CURRENT (AC) GENERATOR AND DISTRIBUTION SYSTEM CIRCUIT COMPONENTS	86
K418	CLEAN CONNECTOR PLUGS	86
I243	ISOLATE MALFUNCTIONS ON ANTI-SKID CIRCUITS	85
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	84
H195	INSPECT EXTERNAL POWER SYSTEM CIRCUIT COMPONENTS	84
K455	PERFORM TCTO MODIFICATIONS OF AIRCRAFT ELECRICAL SYSTEMS	83
K525	REWIRE AIRCRAFT ELECTRICAL SYSTEMS	83
K458	REMOVE OR INSTALL ANTI-SKID CIRCUIT COMPONENTS	82
K523	REPLACE MICRO SWITCHES	79

TABLE A3

GROUP ID NUMBER AND TITLE: GRP382 Flightline POMO Personnel

GROUP SIZE: N=311 PERCENT OF SAMPLE: 17%

AVERAGE GRADE: E-4 AVERAGE TICF: 59 Months

AVERAGE TAFMS: 71 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	99
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	97
I239	ISOLATE MALFUNCTIONS ON AIRCRAFT AC POWER DISTRIBUTION CIRCUITS	97
H197	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	97
H194	INSPECT EXTERIOR LIGHTING CIRCUIT COMPONENTS	95
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	95
I290	ISOLATE MALFUNCTIONS ON LANDING GEAR CONTROL AND WARNING CIRCUITS	95
I234	ISOLATE MALFUNCTIONS ON AC GENERATOR SYSTEMS	95
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	94
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	94
H208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	94
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	94
K475	REMOVE OR INSTALL CONNECTOR PLUGS	92
I303	ISOLATE MALFUNCTIONS ON SPEED BRAKE CONTROL CIRCUITS	92
H212	INSPECT LANDING GEAR CONTROL AND WARNING CIRCUIT COMPONENTS	92
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	92
K439	CRIMP WIRES TO SPLICES AND TERMINALS	91
I286	ISOLATE MALFUNCTIONS ON INTERNAL LIGHTING CIRCUITS	91
K487	REMOVE OR INSTALL FIRE OR OVERHEAT LOOPS	90
H229	INSPECT WARNING LIGHT CIRCUIT COMPONENTS	89
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	89
H224	INSPECT SPEED BRAKE CONTROL CIRCUIT COMPONENTS	88
H163	INSPECT ALTERNATING CURRENT (AC) GENERATOR AND DISTRIBUTION SYSTEM CIRCUIT COMPONENTS	88
I293	ISOLATE MALFUNCTIONS ON NOSE-WHEEL STEERING CIRCUITS	88
I271	ISOLATE MALFUNCTIONS ON EXTERNAL POWER SYSTEM CIRCUITS	87
I243	ISOLATE MALFUNCTIONS ON ANTI-SKID CIRCUITS	87
K418	CLEAN CONNECTOR PLUGS	86
K458	REMOVE OR INSTALL ANTI-SKID CIRCUIT COMPONENTS	86
I240	ISOLATE MALFUNCTIONS ON AIRCRAFT DC POWER DISTRIBUTION	86
I237	ISOLATE MALFUNCTIONS ON AIR REFUELING CIRCUITS	86
K455	PERFORM TCTO MODIFICATIONS OF AIRCRAFT ELECTRICAL SYSTEMS	85

TABLE A4

GROUP ID NUMBER AND TITLE: GRP0612 Depot Level Maintenance Personnel

GROUP SIZE: N=5 PERCENT OF SAMPLE: Less than 1%

AVERAGE GRADE: E-5 AVERAGE TICF: 85 Months

AVERAGE TAFMS: 94 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
K455	PERFORM TCTO MODIFICATIONS OF AIRCRAFT ELECTRICAL SYSTEMS	100
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	100
K439	CRIMP WIRES TO SPLICES AND TERMINALS	100
K475	REMOVE OR INSTALL CONNECTOR PLUGS	100
K521	REPLACE COMPACT WIRE BUNDLES	100
K525	REWIRE AIRCRAFT ELECTRICAL SYSTEMS	100
K437	CRIMP KAPTON WIRE TO CONVERTOR PLUG PINS	100
K418	CLEAN CONNECTOR PLUGS	100
K454	PERFORM SOLDERLESS CONNECTOR INSERTIONS OR EXTRACTIONS	100
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	100
K488	REMOVE OR INSTALL FLEXIBLE CONDUITS	100
H197	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	100
K446	FABRICATE WIRING HARNESSES	100
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	100
H194	INSPECT EXTERIOR LIGHTING CIRCUIT COMPONENTS	100
K506	REMOVE OR INSTALL RELAYS IN CONTROL BOXES OR PANELS	100
H208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	100
K496	REMOVE OR INSTALL LANDING GEAR CONTROL BOXES	100
I234	ISOLATE MALFUNCTIONS ON AC GENERATOR SYSTEMS	100
I239	ISOLATE MALFUNCTIONS ON AIRCRAFT AC POWER DISTRIBUTION CIRCUITS	100
H224	INSPECT SPEED BRAKE CONTROL CIRCUIT COMPONENTS	100
H163	INSPECT ALTERNATING CURRENT (AC) GENERATOR AND DISTRIBUTION SYSTEM CIRCUIT COMPONENTS	100
H227	INSPECT TRANSFORMER-RECTIFIER (TR) CIRCUIT COMPONENTS	100
I258	ISOLATE MALFUNCTIONS OF CONSTANT SPEED DRIVE (CSD) CIRCUITS	100
K401	ASSEMBLE OR DISASSEMBLE CONNECTOR PLUGS	80
K452	PERFORM PROTO-TYPE COMPLIANCE TECHNICAL ORDERS (TCTO)	80
K442	FABRICATE ELECTRICAL LEADS	80
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	80
K456	POT CONNECTORS OR RELAYS	80
K440	FABRICATE BONDINGS	80
K438	CRIMP WIRES TO CONVERTOR PLUG PINS	80
K487	REMOVE OR INSTALL FIRE OR OVERHEAT LOOPS	80

TABLE A5

GROUP ID NUMBER AND TITLE: GRP499 Shift Supervisors

GROUP SIZE: N=18 PERCENT OF SAMPLE: 1%

AVERAGE GRADE: E-5 AVERAGE TICF: 107 Months

AVERAGE TAFMS: 128 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
G149	INSPECT AIRCRAFT ELECTRICAL SYSTEMS FOLLOWING MAINTENANCE	100
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	100
K455	PERFORM TCTO MODIFICATIONS OF AIRCRAFT ELECTRICAL SYSTEMS	100
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	100
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	94
H197	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	94
K418	CLEAN CONNECTOR PLUGS	94
393	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	94
I286	ISOLATE MALFUNCTIONS ON INTERNAL LIGHTING CIRCUITS	94
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	94
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	94
I239	ISOLATE MALFUNCTIONS ON AIRCRAFT AC POWER DISTRIBUTION CIRCUITS	94
K439	CRIMP WIRES TO SPLICES AND TERMINALS	89
E105	MAKE ENTRIES ON AFTO FORMS 781 (AEROSPACE VEHICLE FLIGHT DATA DOCUMENT)	89
H194	INSPECT EXTERIOR LIGHTING CIRCUIT COMPONENTS	89
K454	PERFORM SOLDERLESS CONNECTOR INSERTIONS OR EXTRACTIONS	89
K475	REMOVE OR INSTALL CONNECTOR PLUGS	89
K458	REMOVE OR INSTALL ANTI-SKID CIRCUIT COMPONENTS	89
I243	ISOLATE MALFUNCTIONS ON ANTI-SKID CIRCUITS	89
B40	SUPERVISE AIRCRAFT ELECTRICAL SYSTEMS SPECIALISTS (AFSC 42350)	83
H208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	83
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	83
C63	PREPARE AIRMAN PERFORMANCE REPORTS (APR)	83
I234	ISOLATE MALFUNCTIONS ON AC GENERATOR SYSTEMS	83
K487	REMOVE OR INSTALL FIRE OR OVERHEAT LOOPS	83
H229	INSPECT WARNING LIGHT CIRCUIT COMPONENTS	83
B23	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	83
I290	ISOLATE MALFUNCTIONS ON LANDING GEAR CONTROL AND WARNING CIRCUITS	83
G150	INSPECT ELECTRICAL SYSTEMS FOR CORROSION	78

TABLE A6

GROUP ID NUMBER AND TITLE: GRP478 OJT Trainers

GROUP SIZE: N=5 PERCENT OF SAMPLE: less than 1%

AVERAGE GRADE: E-5 AVERAGE TICF: 72 Months

AVERAGE TAFMS: 84 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
H197	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	100
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	100
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	100
G149	INSPECT AIRCRAFT ELECTRICAL SYSTEMS FOLLOWING MAINTENANCE	100
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	100
G154	PERFORM MAINTENANCE ACTIVITY INSPECTIONS OR SELF-INSPECTIONS	100
G153	OBSERVE IN-PROCESS MAINTENANCE OR MAKE ON THE SPOT CORRECTIVE ACTIONS	100
D75	DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	100
D71	CONDUCT OJT	100
D74	COUNSEL TRAINEES ON TRAINING PROGRESS	100
G152	INSPECT PARTS RECEIVED FOR SERVICEABILITY	100
H212	INSPECT LANDING GEAR CONTROL AND WARNING CIRCUIT COMPONENTS	100
D84	MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	100
D86	REVIEW PROGRESS OF AIRMEN IN CAREER DEVELOPMENT COURSES (CDC)	100
G155	PERFORM SPECIAL INSPECTIONS OF AIRCRAFT ELECTRICAL SYSTEMS	100
H208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	100
K455	PERFORM TCTO MODIFICATIONS OF AIRCRAFT ELECTRICAL SYSTEMS	100
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	100
I290	ISOLATE MALFUNCTIONS ON LANDING GEAR CONTROL AND WARNING CIRCUITS	100
H194	INSPECT EXTERIOR LIGHTING CIRCUIT COMPONENTS	100
K458	REMOVE OR INSTALL ANTI-SKID CIRCUIT COMPONENTS	100
B23	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	100
K418	CLEAN CONNECTOR PLUGS	100
K439	CRIMP WIRES TO SPLICES AND TERMINALS	100
I243	ISOLATE MALFUNCTIONS ON ANTI-SKID CIRCUITS	100
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	100
I301	ISOLATE MALFUNCTIONS ON SEAT POSITIONING CIRCUITS	100
I271	ISOLATE MALFUNCTIONS ON EXTERNAL POWER SYSTEM CIRCUITS	100
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	100
D78	DIRECT OR IMPLEMENT OJT TRAINING PROGRAMS	80
E104	MAKE ENTRIES ON AF FORMS 2005 (ISSUE/TURN IN REQUEST)	80

TABLE A7

GROUP ID NUMBER AND TITLE: GRP399 Flightline Non-PCMO Personnel

GROUP SIZE: N=379 PERCENT OF SAMPLE: 21%

AVERAGE GRADE: E-4 AVERAGE TICF: 68 Months

AVERAGE TAFMS: 78 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
I234	ISOLATE MALFUNCTIONS ON AC GENERATOR SYSTEMS	98
I239	ISOLATE MALFUNCTIONS ON AIRCRAFT AC POWER DISTRIBUTION CIRCUITS	98
I243	ISOLATE MALFUNCTIONS ON ANTI-SKID CIRCUITS	97
I290	ISOLATE MALFUNCTIONS ON LANDING GEAR CONTROL AND WARNING CIRCUITS	97
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	97
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	97
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	96
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	96
I292	ISOLATE MALFUNCTIONS ON NESA GLASS ANTI-ICING CIRCUITS	96
H197	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	96
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	95
K458	REMOVE OR INSTALL ANTI-SKID CIRCUIT COMPONENTS	94
H208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	94
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	94
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	94
K475	REMOVE OR INSTALL CONNECTOR PLUGS	93
H214	INSPECT NESA GLASS ANTI-ICING COMPONENTS	93
H194	INSPECT EXTERIOR LIGHTING CIRCUIT COMPONENTS	93
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	92
I240	ISOLATE MALFUNCTIONS ON AIRCRAFT DC POWER DISTRIBUTION	92
H163	INSPECT ALTERNATING CURRENT (AC) GENERATOR AND DISTRIBUTION SYSTEM CIRCUIT COMPONENTS	92
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	91
H212	INSPECT LANDING GEAR CONTROL AND WARNING CIRCUIT COMPONENTS	90
K508	REMOVE OR INSTALL RHEOSTATS	90
I271	ISOLATE MALFUNCTIONS ON EXTERNAL POWER SYSTEM CIRCUITS	90
I306	ISOLATE MALFUNCTIONS ON TRANSFORMER-RECTIFIER (TR) CIRCUITS	90
H229	INSPECT WARNING LIGHT CIRCUIT COMPONENTS	90
K479	CRIMP WIRES TO SPLICES AND TERMINALS	89
H164	INSPECT ANTI-SKID CIRCUIT COMPONENTS	89
I286	ISOLATE MALFUNCTIONS ON INTERNAL LIGHTING CIRCUITS	88
K523	REPLACE MICRO SWITCHES	88

TABLE A8

GROUP ID NUMBER AND TITLE: GRP533 Line Supervisors

GROUP SIZE: N=61 PERCENT OF SAMPLE: 3%

AVERAGE GRADE: E-6 AVERAGE TICF: 122 Months

AVERAGE TAFMS: 132 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
I234	ISOLATE MALFUNCTINOS ON AC GENERATOR SYSTEMS	100
I239	ISOLATE MALFUNCTIONS ON AIRCRAFT AC POWER DISTRIBUTION CIRCUITS	100
I243	ISOLATE MALFUNCTIONS ON ANTI-SKID CIRCUITS	100
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	98
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	98
I292	ISOLATE MALFUNCTIONS ON NESA GLASS ANTI-ICING CIRCUITS	98
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	97
H163	INSPECT ALTERNATING CURRENT (AC) GENERATOR AND DISTRIBUTION SYSTEM CIRCUIT COMPONENTS	97
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	97
H208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	97
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	97
I290	ISOLATE MALFUNCTIONS ON LANDING GEAR CONTROL AND WARNING CIRCUITS	97
G149	INSPECT AIRCRAFT ELECTRICAL SYSTEMS FOLLOWING MAINTENANCE	95
B21	COORDINATE WITH MAINTENANCE CONTROL ON MAINTENANCE ACTIVITIES	95
B23	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	95
I286	ISOLATE MALFUNCTIONS ON INTERNAL LIGHTING CIRCUITS	95
H214	INSPECT NESA GLASS ANTI-ICING CIRCUIT COMPONENTS	95
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	95
H194	INSPECT EXTERIOR LIGHTING CIRCUIT COMPONENTS	93
H195	INSPECT EXTERNAL POWER SYSTEM CIRCUIT COMPONENTS	93
H164	INSPECT ANTI-SKID CIRCUIT COMPONENTS	92
H197	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	92
K458	REMOVE OR INSTALL ANTI-SKID CIRCUIT COMPONENTS	92
I306	ISOLATE MALFUNCTIONS ON TRANSFORMER-RECTIFIER (TR) CIRCUITS	92
B40	SUPERVISE AIRCRAFT ELECTRICAL SYSTEMS SPECIALISTS (AFSC 42350)	90
E105	MAKE ENTRIES ON AFTO FORMS 781 (AEROSPACE VEHICLE FLIGHT DATA DOCUMENT)	90
I271	ISOLATE MALFUNCTIONS ON EXTERNAL POWER SYSTEM CIRCUITS	90
B39	SUPERVISE AIRCRAFT ELECTRICAL SYSTEMS HELPERS (AFSC 42330)	89

TABLE A9

GROUP ID NUMBER AND TITLE: GRP466 FTD Trainers

GROUP SIZE: N=7 PERCENT OF SAMPLE: Less than 1%

AVERAGE GRADE: E-6 AVERAGE TICF: 159 Months

AVERAGE TAFMS: 162 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
D75	DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	100
H212	INSPECT LANDING GEAR CONTROL AND WARNING CIRCUIT COMPONENTS	100
H227	INSPECT TRANSFORMER-RECTIFIER (TR) CIRCUIT COMPONENTS	100
H164	INSPECT ANTI-SKID COMPONENTS	100
H195	INSPECT EXTERNAL POWER SYSTEM CIRCUIT COMPONENTS	100
H197	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	100
H178	INSPECT CONSTANT SPEED DRIVE (CSD) CIRCUIT COMPONENTS	100
I239	ISOLATE MALFUNCTIONS ON AIRCRAFT AC POWER DISTRIBUTION CIRCUITS	100
H162	INSPECT AIRCRAFT FLIGHT CONTROL CIRCUIT COMPONENTS	100
H229	INSPECT WARNING LIGHT CIRCUIT COMPONENTS	100
I243	ISOLATE MALFUNCTIONS ON ANTI-SKID CIRCUITS	100
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	100
G150	INSPECT ELECTRICAL SYSTEMS FOR CORROSION	100
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	100
I290	ISOLATE MALFUNCTIONS ON LANDING GEAR CONTROL AND WARNING CIRCUITS	100
I306	ISOLATE MALFUNCTIONS ON TRANSFORMER-RECTIFIER (TR) CIRCUITS	100
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	100
I234	ISOLATE MALFUNCTIONS ON AC GENERATOR SYSTEMS	100
B23	COUNSEL PERSONEL ON PERSONAL OR MILITARY-RELATED MATTERS	100
I240	ISOLATE MALFUNCTIONS ON AIRCRAFT DC POWER DISTRIBUTION	100
I276	ISOLATE MALFUNCTIONS ON FLAP AND SLAT CONTROL AND WARNING CIRCUITS	100
H186	INSPECT ELECTRICAL OR AIR OPERATED STARTER CIRCUIT COMPONENTS	100
I258	ISOLATE MALFUNCTIONS OF CONSTANT SPEED DRIVE (CSD) CIRCUITS	100
G149	INSPECT AIRCRAFT ELECTRICAL SYSTEMS FOLLOWING MAINTENANCE	100
I241	ISOLATE MALFUNCTIONS ON AIRCRAFT FLIGHT CONTROL CIRCUITS	100
I264	ISOLATE MALFUNCTIONS ON ELECTRICAL OR AIR OPERATED STARTER CIRCUITS	100
I288	ISOLATE MALFUNCTIONS ON JET ENGINE IGNITION SYSTEM CIRCUITS	100
I294	ISOLATE MALFUNCTIONS ON PRESSURE WARNING CIRCUITS	100
D70	CONDUCT FIELD TRAINING DETACHMENT (FTD) CLASSROOM TRAINING	86
D74	COUNSEL TRAINEES ON TRAINING PROGRESS	86

TABLE A10

GROUP ID NUMBER AND TITLE: GRP407 Shift Supervisors

GROUP SIZE: N=8 PERCENT OF SAMPLE: Less than 1%

AVERAGE GRADE: E-5 AVERAGE TICF: 105 Months

AVERAGE TAFMS: 114 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
G149	INSPECT AIRCRAFT ELECTRICAL SYSTEMS FOLLOWING MAINTENANCE	100
B40	SUPERVISE AIRCRAFT ELECTRICAL SYSTEMS SPECIALISTS (AFSC 42350)	100
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	100
I239	ISOLATE MALFUNCTIONS ON AIRCRAFT AC POWER DISTRIBUTION CIRCUITS	100
K475	REMOVE OR INSTALL CONNECTOR PLUGS	100
K53	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	100
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	100
I264	ISOLATE MALFUNCTIONS ON ELECTRICAL OR AIR OPERATED STARTER CIRCUITS	100
I243	ISOLATE MALFUNCTIONS ON ANTI-SKID CIRCUITS	100
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	100
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	100
K500	REMOVE OR INSTALL NESA GLASS ANTI-ICING CIRCUIT COMPONENTS	100
I240	ISOLATE MALFUNCTIONS ON AIRCRAFT DC POWER DISTRIBUTION	100
I246	ISOLATE MALFUNCTIONS ON BATTERY CHARGER SYSTEM CIRCUITS	100
I234	ISOLATE MALFUNCTIONS ON AC GENERATOR SYSTEMS	88
E105	MAKE ENTRIES ON AFTO FORMS 781 (AEROSPACE VEHICLE FLIGHT DATA DOCUMENT)	88
K439	CRIMP WIRES TO SPLICES AND TERMINALS	88
I290	ISOLATE MALFUNCTIONS ON LANDING GEAR CONTROL AND WARNING CIRCUITS	88
I258	ISOLATE MALFUNCTIONS OF CONSTANT SPEED DRIVE (CSD) CIRCUITS	88
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	88
I286	ISOLATE MALFUNCTIONS ON INTERNAL LIGHTING CIRCUITS	88
K458	REMOVE OR INSTALL ANTI-SKID CIRCUIT COMPONENTS	88
I271	ISOLATE MALFUNCTIONS ON EXTERNAL POWER SYSTEM CIRCUITS	88
K522	REPLACE FUSES, CURRENT LIMITERS,OR CIRCUIT BREAKERS	88
E90	COMPLETE AF FORMS 1492 (DANGER)	88
I292	ISOLATE MALFUNCTIONS ON NESA GLASS ANTI-ICING CIRCUITS	88
K525	REWIRE AIRCRAFT ELECTRICAL SYSTEMS	88
I241	ISOLATE MALFUNCTIONS ON AIRCRAFT FLIGHT CONTROL CIRCUITS	88

TABLE A11

GROUP ID NUMBER AND TITLE: GRP468 MAC General Flightline Maintenance Personnel

GROUP SIZE: N=26 PERCENT OF SAMPLE: 1%

AVERAGE GRADE: E-3 AVERAGE TICF: 25 Months

AVERAGE TAFMS: 31 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
H208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	100
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	96
I243	ISOLATE MALFUNCTIONS ON ANTI-SKID CIRCUITS	96
H197	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	96
I290	ISOLATE MALFUNCTIONS ON LANDING GEAR CONTROL AND WARNING CIRCUITS	96
K475	REMOVE OR INSTALL CONNECTOR PLUGS	92
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	92
H214	INSPECT NESA GLASS ANTI-ICING CIRCUIT COMPONENTS	92
H212	INSPECT LANDING GEAR CONTROL AND WARNING CIRCUIT COMPONENTS	92
I254	ISOLATE MALFUNCTIONS ON CARGO DOOR CONTROL AND WARNING CIRCUITS	92
I292	ISOLATE MALFUNCTIONS ON NESA GLASS ANTI-ICING CIRCUITS	92
K458	REMOVE OR INSTALL ANTI-SKID CIRCUIT COMPONENTS	88
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	88
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	88
H164	INSPECT ANTI-SKID CIRCUIT COMPONENTS	88
I140	ISOLATE MALFUNCTIONS ON AIRCRAFT DC POWER DISTRIBUTION	88
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	88
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	85
H194	INSPECT EXTERIOR LIGHTING CIRCUIT COMPONENTS	85
I234	ISOLATE MALFUNCTIONS ON AC GENERATOR SYSTEMS	85
I239	ISOLATE MALFUNCTIONS ON AIRCRAFT AC POWER DISTRIBUTION CIRCUITS	85
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	85
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	85
I280	ISOLATE MALFUNCTIONS ON GALLEY OR LATRINE ELECTRICAL CIRCUITS	85
K525	REWIRE AIRCRAFT ELECTRICAL SYSTEMS	85
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	81
H203	INSPECT GALLEY OR LATRINE ELECTRICAL CIRCUIT COMPONENTS	81
H195	INSPECT EXTERNAL POWER SYSTEM CIRCUIT COMPONENTS	81
H229	INSPECT WARNING LIGHT CIRCUIT COMPONENTS	77

TABLE A12

GROUP ID NUMBER AND TITLE: GRP416 Advanced Reconnaissance Aircraft Maintenance Personnel

GROUP SIZE: N=6 PERCENT OF SAMPLE: Less than 1%

AVERAGE GRADE: E-6 AVERAGE TICF: 133 Months

AVERAGE TAFMS: 140 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
H160	INSPECT AIRCRAFT BATTERIES	100
H229	INSPECT WARNING LIGHT CIRCUIT COMPONENTS	100
I286	ISOLATE MALFUNCTIONS ON INTERNAL LIGHTING CIRCUITS	100
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	100
H208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	100
I278	ISOLATE MALFUNCTIONS ON FUEL CONTROL AND WARNING CIRCUITS	100
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	100
K454	PERFORM SOLDERLESS CONNECTOR INSERTIONS OR EXTRACTIONS	100
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	100
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	100
I240	ISOLATE MALFUNCTIONS ON AIRCRAFT DC POWER DISTRIBUTION	100
E101	INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	100
E95	COMPLETE CONDITION TAGS AND LABELS	100
K447	INSPECT CONTROL BOXES OR JUNCTION BOXES FOR BURNING OR CHAFFING	100
I271	ISOLATE MALFUNCTIONS ON EXTERNAL POWER SYSTEM CIRCUITS	100
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	100
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	100
K506	REMOVE OR INSTALL RELAYS IN CONTROL BOXES OR PANELS	100
D71	CONDUCT OJT	100
B21	COORDINATE WITH MAINTENANCE CONTROL ON MAINTENANCE ACTIVITIES	100
K482	REMOVE OR INSTALL EXTERNAL POWER SYSTEM CONTROL COMPONENTS	100
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	100
K525	REWIRE AIRCRAFT ELECTRICAL SYSTEMS	100
D75	DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	100
E90	COMPLETE AF FORMS 1492 (DANGER)	100
K508	REMOVE OR INSTALL RHEOSTATS	100
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	100
C54	EVALUATE MAINTENANCE AND USE OF WORKSPACE, EQUIPMENT, OR SUPPLIES	100
B23	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	100
K413	ASSEMBLE OR DISASSEMBLE SILVER ZINC BATTERIES	83

TABLE A13

GROUP ID NUMBER AND TITLE: GRP349 Basic Aircraft Electrical Systems Maintenance Personnel

GROUP SIZE: N=73 PERCENT OF SAMPLE: 4%

AVERAGE GRADE: E-4 AVERAGE TICF: 43 Months

AVERAGE TAFMS: 52 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	99
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	97
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	97
H197	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	96
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	95
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	95
K475	REMOVE OR INSTALL CONNECTOR PLUGS	95
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	95
K418	CLEAN CONNECTOR PLUGS	95
K439	CRIMP WIRES TO SPLICES AND TERMINALS	93
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	93
H194	INSPECT EXTERIOR LIGHTING CIRCUIT COMPONENTS	92
I240	ISOLATE MALFUNCTIONS ON AIRCRAFT DC POWER DISTRIBUTION	90
H208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	89
H212	INSPECT LANDING GEAR CONTROL AND WARNING CIRCUIT COMPONENTS	89
K525	REWIRE AIRCRAFT ELECTRICAL SYSTEMS	89
I290	ISOLATE MALFUNCTIONS ON LANDING GEAR CONTROL AND WARNING CIRCUITS	88
I261	ISOLATE MALFUNCTIONS ON DC GENERATOR SYSTEMS	88
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	88
H229	INSPECT WARNING LIGHT CIRCUIT COMPONENTS	88
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	88
H161	INSPECT AIRCRAFT DIRECT CURRENT (DC) POWER GENERATOR CIRCUIT AND DISTRIBUTION CIRCUIT COMPONENTS	85
E105	MAKE ENTRIES ON AFTO FORMS 781 (AEROSPACE VEHICLE FLIGHT DATA DOCUMENT)	84
I286	ISOLATE MALFUNCTIONS ON INTERNAL LIGHTING CIRCUITS	84
K523	REPLACE MICRO SWITCHES	84
K401	ASSEMBLE OR DISASSEMBLE CONNECTOR PLUGS	81
K508	REMOVE OR INSTALL RHEOSTATS	81
H182	INSPECT DC GENERATOR SYSTEM CIRCUIT COMPONENTS	79
G150	INSPECT ELECTRICAL SYSTEMS FOR CORROSION	78

TABLE A14

GROUP ID NUMBER AND TITLE: GRP326 C-5A Aircraft Systems Maintenance Specialists

GROUP SIZE: N=5 PERCENT OF SAMPLE: Less than 1%

AVERAGE GRADE: E-4 AVERAGE TICF: 38 Months

AVERAGE TAFMS: 42 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	100
K475	REMOVE OR INSTALL CONNECTOR PLUGS	100
K401	ASSEMBLE OR DISASSEMBLE CONNECTOR PLUGS	100
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	100
H197	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	100
K418	CLEAN CONNECTOR PLUGS	100
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	100
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	100
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	100
E90	COMPLETE AF FORMS 1492 (DANGER)	100
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	100
K505	REMOVE OR INSTALL PROXIMITY SENSORS	100
I271	ISOLATE MALFUNCTIONS ON EXTERNAL POWER SYSTEM CIRCUITS	100
I243	ISOLATE MALFUNCTIONS ON ANTI-SKID CIRCUITS	100
I244	ISOLATE MALFUNCTIONS ON AUXILIARY POWER UNIT (APU) COMPONENTS	100
I239	ISOLATE MALFUNCTIONS ON AIRCRAFT AC POWER DISTRIBUTION CIRCUITS	100
I254	ISOLATE MALFUNCTIONS ON CARGO DOOR CONTROL AND WARNING CIRCUITS	100
I277	ISOLATE MALFUNCTIONS ON FLIGHT CONTROL ASYMMETRY SYSTEM CIRCUITS	100
I240	ISOLATE MALFUNCTIONS ON AIRCRAFT DC POWER DISTRIBUTION	100
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	80
G149	INSPECT AIRCRAFT ELECTRICAL SYSTEMS FOLLOWING MAINTENANCE	80
H217	INSPECT PROXIMITY SENSORS	80
K487	REMOVE OR INSTALL FIRE OR OVERHEAT LOOPS	80
K442	FABRICATE ELECTRICAL LEADS	80
I234	ISOLATE MALFUNCTIONS ON AC GENERATORS SYSTEMS	80
H160	INSPECT AIRCRAFT BATTERIES	80
K446	FABRICATE WIRING HARNESSES	80
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	80
H219	INSPECT RAM AIR TURBINE (RAT) CIRCUIT COMPONENTS	80

TABLE A15

GROUP ID NUMBER AND TITLE: GRP346 Transient Aircraft Maintenance Personnel

GROUP SIZE: N=61 PERCENT OF SAMPLE: 3%

AVERAGE GRADE: E-4 AVERAGE TICF: 63 Months

AVERAGE TAFMS: 71 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	100
I247	ISOLATE MALFUNCTIONS ON BATTERY DISTRIBUTION CIRCUITS	100
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	98
K475	REMOVE OR INSTALL CONNECTOR PLUGS	98
I239	ISOLATE MALFUNCTIONS ON AIRCRAFT AC POWER DISTRIBUTION CIRCUITS	98
I240	ISOLATE MALFUNCTIONS ON AIRCRAFT DC POWER DISTRIBUTION	98
I290	ISOLATE MALFUNCTIONS ON LANDING GEAR CONTROL AND WARNING CIRCUITS	98
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	98
H197	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	98
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	98
I271	ISOLATE MALFUNCTIONS ON EXTERNAL POWER SYSTEM CIRCUITS	98
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	98
I234	ISOLATE MALFUNCTIONS ON AC GENERATOR SYSTEMS	97
H194	INSPECT EXTERIOR LIGHTING CIRCUIT COMPONENTS	97
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	97
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	97
K418	CLEAN CONNECTOR PLUGS	97
H161	INSPECT AIRCRAFT DIRECT CURRENT (DC) POWER GENERATOR CIRCUIT AND DISTRIBUTION CIRCUIT COMPONENTS	97
K456	POT CONNECTORS OR RELAYS	97
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTIN RECORD)	95
H229	INSPECT WARNING LIGHT CIRCUIT COMPONENTS	95
I286	ISOLATE MALFUNCTIONS ON INTERNAL LIGHTING CIRCUITS	95
H208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	95
H162	INSPECT AIRCRAFT FLIGHT CONTROL CIRCUIT COMPONENTS	95
H182	INSPECT DC GENERATOR SYSTEM CIRCUIT COMPONENTS	95
H227	INSPECT TRANSFORMER-RECTIFIER (TR) CIRCUIT COMPONENTS	95
439	CRIMP WIRES TO SPLICES AND TERMINALS	93
H212	INSPECT LANDING GEAR CONTROL AND WARNING CIRCUIT COMPONENTS	93
K401	ASSEMBLE OR DISASSEMBLE CONNECTOR PLUGS	93
K508	REMOVE OR INSTALL RHEOSTATS	93
I241	ISOLATE MALFUNCTIONS ON AIRCRAFT FLIGHT CONTROL CIRCUITS	93

TABLE A16

GROUP ID NUMBER AND TITLE: GRP249 Troubleshooting and Maintenance Cluster

GROUP SIZE: N=200 PERCENT OF SAMPLE: 11%

AVERAGE GRADE: E-4 AVERAGE TICF: 45 Months

AVERAGE TAFMS: 54 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	97
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	95
I234	ISOLATE MALFUNCTIONS ON AC GENERATOR SYSTEMS	94
I290	ISOLATE MALFUNCTIONS ON LANDING GEAR CONTROL AND WARNING CIRCUITS	94
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	94
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	92
I243	ISOLATE MALFUNCTIONS ON ANTI-SKID CIRCUITS	92
I239	ISOLATE MALFUNCTIONS ON AIRCRAFT AC POWER DISTRIBUTION CIRCUITS	92
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	91
K475	REMOVE OR INSTALL CONNECTOR PLUGS	90
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	90
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	90
I286	ISOLATE MALFUNCTIONS ON INTERNAL LIGHTING CIRCUITS	89
K458	REMOVE OR INSTALL ANTI-SKID CIRCUIT COMPONENTS	88
K439	CRIMP WIRES TO SPLICES AND TERMINALS	87
I240	ISOLATE MALFUNCTIONS ON AIRCRAFT DC POWER DISTRIBUTION	87
I271	ISOLATE MALFUNCTIONS ON EXTERNAL POWER SYSTEM CIRCUITS	81
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	79
K418	CLEAN CONNECTOR PANELS	75
K455	PERFORM TCTO MODIFICATIONS OF AIRCRAFT ELECTRICAL SYSTEMS	75
K401	ASSEMBLE OR DISASSEMBLE CONNECTOR PLUGS	72
K525	REWIRE AIRCRAFT ELECTRICAL SYSTEMS	71
I241	ISOLATE MALFUNCTIONS ON AIRCRAFT FLIGHT CONTROL CIRCUITS	69
I242	ISOLATE MALFUNCTIONS ON ANTI-ICE OR DEICE ELECTRICAL CONTROL AND WARNING CIRCUITS	68
I306	ISOLATE MALFUNCTIONS ON TRANSFORMER-RECTIFIER (TR) CIRCUITS	68
K487	REMOVE OR INSTALL FIRE OR OVERHEAT LOOPS	67
I247	ISOLATE MALFUNCTIONS ON BATTERY DISTRIBUTION CIRCUITS	67
I278	ISOLATE MALFUNCTIONS ON FUEL CONTROL AND WARNING CIRCUITS	65
I258	ISOLATE MALFUNCTIONS ON CONSTANT SPEED DRIVE (CSD) CIRCUITS	64
K454	PERFORM SOLDERLESS CONNECTOR INSERTIONS OR EXTRACTIONS	63

TABLE A17

GROUP ID NUMBER AND TITLE: GRP358 Flightline Troubleshooting Personnel

GROUP SIZE: N=164 PERCENT OF SAMPLE: 9%

AVERAGE GRADE: E-4 AVERAGE TICF: 44 Months

AVERAGE TAFMS: 52 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	98
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	97
I234	ISOLATE MALFUNCTIONS ON AC GENERATOR SYSTEMS	96
I239	ISOLATE MALFUNCTIONS ON AIRCRAFT AC POWER DISTRIBUTION CIRCUITS	96
I290	ISOLATE MALFUNCTIONS ON LANDING GEAR CONTROL AND WARNING CIRCUITS	96
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	95
I243	ISOLATE MALFUNCTIONS ON ANTI-SKID CIRCUITS	95
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	95
I286	ISOLATE MALFUNCTIONS ON INTERNAL LIGHTING CIRCUITS	93
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	92
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	92
I240	ISOLATE MALFUNCTIONS ON AIRCRAFT DC POWER DISTRIBUTION	91
K475	REMOVE OR INSTALL CONNECTOR PLUGS	91
K458	REMOVE OR INSTALL ANTI-SKID CIRCUIT COMPONENTS	91
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	90
K439	CRIMP WIRES TO SPLICES AND TERMINALS	88
I271	ISOLATE MALFUNCTIONS ON EXTERNAL POWER SYSTEM CIRCUITS	84
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	83
K455	PERFORM TCTO MODIFICATIONS OF AIRCRAFT ELECTRICAL SYSTEMS	77
K418	CLEAN CONNECTOR PLUGS	76
K525	REWIRE AIRCRAFT ELECTRICAL SYSTEMS	76
I241	ISOLATE MALFUNCTIONS ON AIRCRAFT FLIGHT CONTROL CIRCUITS	74
K401	ASSEMBLE OR DISASSEMBLE CONNECTOR PLUGS	73
I247	ISOLATE MALFUNCTIONS ON BATTERY DISTRIBUTION CIRCUITS	73
I306	ISOLATE MALFUNCTIONS ON TRANSFORMER-RECTIFIER (TR) CIRCUITS	73
I242	ISOLATE MALFUNCTIONS OF ANTI-ICE OR DEICE ELECTRICAL CONTROL AND WARNING CIRCUITS	71
I278	ISOLATE MALFUNCTIONS ON FUEL CONTROL AND WARNING CIRCUITS	70
K487	REMOVE OR INSTALL FIRE OR OVERHEAT LOOPS	68
I264	ISOLATE MALFUNCTIONS ON ELECTRICAL OR AIR OPERATED STARTER CIRCUITS	67

TABLE A18

GROUP ID NUMBER AND TITLE: GRP296 General Electrical Systems Maintenance and Troubleshooting

GROUP SIZE: N=20 PERCENT OF SAMPLE: 1%

AVERAGE GRADE: E-4 AVERAGE TICF: 47 Months

AVERAGE TAFMS: 57 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	95
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	95
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	95
K475	REMOVE OR INSTALL CONNECTOR PLUGS	90
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	90
K439	CRIMP WIRES TO SPLICES AND TERMINALS	85
G150	INSPECT ELECTRICAL SYSTEMS FOR CORROSION	85
K418	CLEAN CONNECTOR PLUGS	85
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	85
K455	PERFORM TCTO MODIFICATIONS OF AIRCRAFT ELECTRICAL SYSTEMS	80
K458	REMOVE OR INSTALL ANTI-SKID CIRCUIT COMPONENTS	80
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	80
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	80
I290	ISOLATE MALFUNCTIONS ON LANDING GEAR CONTROL AND WARNING CIRCUITS	80
I243	ISOLATE MALFUNCTIONS ON ANTI-SKID CIRCUITS	80
I234	ISOLATE MALFUNCTIONS ON AC GENERATOR SYSTEMS	75
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	70
K487	REMOVE OR INSTALL FIRE OR OVERHEAT LOOPS	70
I237	ISOLATE MALFUNCTIONS ON AIR REFUELING CIRCUITS	70
G149	INSPECT AIRCRAFT ELECTRICAL SYSTEMS FOLLOWING MAINTENANCE	65
K401	ASSEMBLE OR DISASSEMBLE CONNECTOR PLUGS	65
H197	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	65
K271	ISOLATE MALFUNCTIONS ON EXTERNAL POWER SYSTEM CIRCUITS	65
K510	REMOVE OR INSTALL ROTATING BEACONS, LANDING LIGHTS, OR TAXI LIGHTS	60
G155	PERFORM SPECIAL INSPECTIONS OF AIRCRAFT ELECTRICAL SYSTEMS	60
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	60
I239	ISOLATE MALFUNCTIONS ON AIRCRAFT AC POWER DISTRIBUTION CIRCUITS	60
E98	COMPLETE SUPPLY FORMS OR PARTS REQUESTS	55

TABLE A19

GROUP ID NUMBER AND TITLE: GRP294 Avionics Maintenance Personnel

GROUP SIZE: N=5 PERCENT OF SAMPLE: Less than 1%

AVERAGE GRADE: E-3 AVERAGE TICF: 31 Months

AVERAGE TAFMS: 36 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	100
K439	CRIMP WIRES TO SPLICES AND TERMINALS	100
G150	INSPECT ELECTRICAL SYSTEMS FOR CORROSION	100
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	100
I293	ISOLATE MALFUNCTIONS ON NOSE-WHEEL STEERING CIRCUITS	100
E101	INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	100
K454	PERFORM SOLDERLESS CONNECTOR INSERTIONS OR EXTRACTIONS	100
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	100
K447	INSPECT CONTROL BOXES OR JUNCTION BOXES FOR BURNING OR CHAFFING	100
K418	CLEAN CONNECTOR PLUGS	100
K525	REWIRE AIRCRAFT ELECTRICAL SYSTEMS	100
K523	REPLACE MICRO SWITCHES	100
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	100
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	100
H165	INSPECT AUXILIARY POWER UNIT (APU) CIRCUIT COMPONENTS	100
I286	ISOLATE MALFUNCTIONS ON INTERNAL LIGHTING CIRCUITS	100
I241	ISOLATE MALFUNCTIONS ON AIRCRAFT FLIGHT CONTROL CIRCUITS	100
K394	ADJUST PROXIMITY SENSORS	80
I296	ISOLATE MALFUNCTIONS ON PROXIMITY SENSORS	80
H217	INSPECT PROXIMITY SENSORS	80
H212	INSPECT LANDING GEAR CONTROL AND WARNING CIRCUIT COMPONENTS	80
E105	MAKE ENTRIES ON AFTO FORMS 781 (AEROSPACE VEHICLE FLIGHT DATA DOCUMENT)	80
K456	POT CONNECTORS OR RELAYS	80
K458	REMOVE OR INSTALL ANTI-SKID CIRCUIT COMPONENTS	80
I290	ISOLATE MALFUNCTIONS ON LANDING GEAR CONTROL AND WARNING CIRCUITS	80
H208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	80
H203	INSPECT GALLEY OR LATRINE ELECTRICAL CIRCUIT COMPONENTS	80
I278	ISOLATE MALFUNCTIONS ON FUEL CONTROL AND WARNING CIRCUITS	80
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	80

TABLE A20

GROUP ID NUMBER AND TITLE: GRP224 In-Shop Maintenance Cluster

GROUP SIZE: N=142 PERCENT OF SAMPLE: 8%

AVERAGE GRADE: E-4 AVERAGE TICF: 39 Months

AVERAGE TAFMS: 53 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
K408	ASSEMBLE OR DISASSEMBLE NICKEL-CADMIUM BATTERIES	95
K473	REMOVE OR INSTALL CELLS ON NICKEL-CADMIUM BATTERIES	94
K434	CLEAN NICKEL-CADMIUM BATTERIES	93
K439	CRIMP WIRES TO SPLICES AND TERMINALS	93
K475	REMOVE OR INSTALL CONNECTOR PLUGS	92
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	92
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	89
H160	INSPECT AIRCRAFT BATTERIES	89
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	88
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	87
K418	CLEAN CONNECTOR PLUGS	87
K476	REMOVE OR INSTALL CONNECTORS ON NICKEL-CADMIUM BATTERIES	86
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	84
K455	PERFORM TCTO MODIFICATIONS OF AIRCRAFT ELECTRICAL SYSTEMS	82
K401	ASSEMBLE OR DISASSEMBLE CONNECTOR PLUGS	81
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	81
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	81
J388	PERFORM CAPACITANCE TESTS OR SERVICES ON NICKEL-CADMIUM BATTERIES	80
L548	MAINTAIN BATTERY CHARGERS	77
K433	CLEAN LEAD ACID BATTERIES	76
K454	PERFORM SOLDERLESS CONNECTOR INSERTIONS OR EXTRACTIONS	76
H208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	76
H194	INSPECT EXTERIOR LIGHTING CIRCUIT COMPONENTS	76
L527	INSPECT SHOP TEST EQUIPMENT OR TEST STANDS	75
H197	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	74
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	70
J352	BENCH CHECK EXTERNAL LIGHTING CIRCUIT COMPONENTS	70
K506	REMOVE OR INSTALL RELAYS IN CONTROL BOXES OR PANELS	69
E101	INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	68
E95	COMPLETE CONDITION TAGS AND LABELS	68
I286	ISOLATE MALFUNCTIONS ON INTERNAL LIGHTING CIRCUITS	67
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	67

TABLE A21

GROUP ID NUMBER AND TITLE: GRP252 POMO/Fighter Maintenance Personnel

GROUP SIZE: N=103 PERCENT OF SAMPLE: 6%

AVERAGE GRADE: E-4 AVERAGE TICF: 41 Months

AVERAGE TAFMS: 55 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	98
K473	REMOVE OR INSTALL CELLS ON NICKEL-CADMIUM BATTERIES	97
K408	ASSEMBLE OR DISASSEMBLE NICKEL-CADMIUM BATTERIES	95
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	95
K475	REMOVE OR INSTALL CONNECTOR PLUGS	95
K434	CLEAN NICKEL-CADMIUM BATTERIES	94
K439	CRIMP WIRES TO SPLICES AND TERMINALS	91
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	89
K418	CLEAN CONNECTOR PLUGS	89
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	88
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	88
H160	INSPECT AIRCRAFT BATTERIES	87
K476	REMOVE OR INSTALL CONNECTORS ON NICKEL-CADMIUM BATTERIES	87
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	87
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	85
J388	PERFORM CAPACITANCE TESTS OR SERVICES ON NICKEL-CADMIUM BATTERIES	84
K455	PERFORM TCTO MODIFICATIONS OF AIRCRAFT ELECTRICAL SYSTEMS	84
K433	CLEAN LEAD ACID BATTERIES	83
K401	ASSEMBLE OR DISASSEMBLE CONNECTOR PLUGS	83
H194	INSPECT EXTERIOR LIGHTING CIRCUIT COMPONENTS	83
L548	MAINTAIN BATTERY CHARGERS	83
L527	INSPECT SHOP TEST EQUIPMENT OR TEST STANDS	82
E95	COMPLETE CONDITION TAGS AND LABELS	81
J352	BENCH CHECK EXTERNAL CIRCUIT COMPONETS	80
H208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	80
K506	REMOVE OR INSTALL RELAYS IN CONTROL BOXES OR PANELS	79
K454	PERFORM SOLDERLESS CONNECTOR INSERTIONS OR EXTRACTIONS	77
E101	INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	77
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	77
H197	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	76
L535	ISOLATE MALFUNCTIONS ON BATTERY CHARGERS	75
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	74

TABLE A22

GROUP ID NUMBER AND TITLE: GRP517 Training Center Test Equipment Maintenance Personnel

GROUP SIZE: N=6

PERCENT OF SAMPLE: Less than 1%

AVERAGE GRADE: E-4

AVERAGE TICF: 36 Months

AVERAGE TAFMS: 42 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
K433	CLEAN LEAD ACID BATTERIES	100
K439	CRIMP WIRES TO SPLICES AND TERMINALS	100
K475	REMOVE OR INSTALL CONNECTOR PLUGS	100
K434	CLEAN NICKEL-CADMIUM BATTERIES	100
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	100
K408	ASSEMBLE OR DISASSEMBLE NICKEL-CADMIUM BATTERIES	100
K473	REMOVE OR INSTALL CELLS ON NICKEL-CADMIUM BATTERIES	100
K401	ASSEMBLE OR DISASSEMBLE CONNECTOR PLUGS	100
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	100
K476	REMOVE OR INSTALL CONNECTORS ON NICKEL-CADMIUM BATTERIES	100
K454	PERFORM SOLDERLESS CONNECTOR INSERTIONS OR EXTRACTIONS	100
K446	FABRICATE WIRING HARNESSES	100
K418	CLEAN CONNECTOR PLUGS	100
K507	REMOVE OR INSTALL RESISTORS OR CAPACITORS ON CONVENTIONAL CIRCUITS	100
K506	REMOVE OR INSTALL RELAYS IN CONTROL BOXES OR PANELS	100
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	100
L535	ISOLATE MALFUNCTIONS ON BATTERY CHARGERS	100
E95	COMPLETE CONDITION TAGS AND LABELS	100
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	100
K453	PERFORM SOLDERING ON SOLID-STATE CIRCUIT BOARDS	100
E104	MAKE ENTRIES ON AF FORMS 2005 (ISSUE/TURN IN REQUEST)	100
I246	ISOLATE MALFUNCTIONS ON BATTERY CHARGER SYSTEM CIRCUITS	100
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	100
K456	POT CONNECTORS OR RELAYS	100
H160	INSPECT AIRCRAFT BATTERIES	83
J387	PERFORM CAPACITANCE TESTS ON LEAD ACID BATTERIES	83
J388	PERFORM CAPACITANCE TESTS OR SERVICES ON NICKEL-CADMIUM BATTERIES	83
L548	MAINTAIN BATTERY CHARGERS	83
L554	REWIRE OR REPLACE COMPONENTS ON LOCALLY MANUFACTURED TEST EQUIPMENT	83
K469	REMOVE OR INSTALL BRUSHES OR BRUSH HOLDERS IN MOTORS	83
K442	FABRICATE ELECTRICAL LEADS	83

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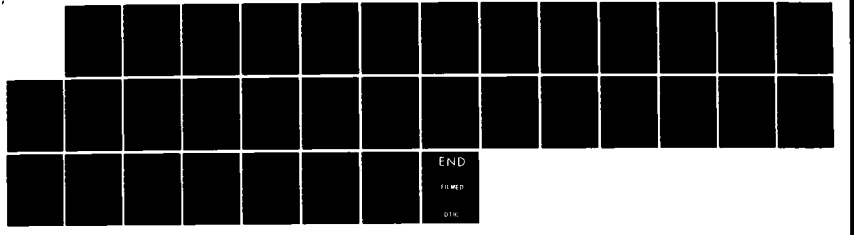

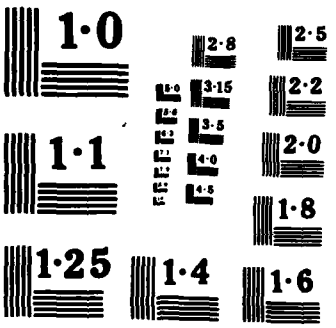
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TABLE A23

GROUP ID NUMBER AND TITLE: GRP381 Bench Checking Specialists

GROUP SIZE: N=15 PERCENT OF SAMPLE: 1%

AVERAGE GRADE: E-4 AVERAGE TICF: 37 Months

AVERAGE TAFMS: 55 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
K408	ASSEMBLE OR DISASSEMBLE NICKEL-CADMIUM BATTERIES	100
K473	REMOVE OR INSTALL CELLS ON NICKEL-CADMIUM BATTERIES	100
K434	CLEAN NICKEL-CADMIUM BATTERIES	93
E95	COMPLETE CONDITION TAGS AND LABELS	93
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	93
K476	REMOVE OR INSTALL CONNECTORS ON NICKEL-CADMIUM BATTERIES	93
E101	INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	93
K475	REMOVE OR INSTALL CONNECTOR PLUGS	93
K439	CRIMP WIRES TO SPLICES AND TERMINALS	93
J352	BENCH CHECK EXTERNAL LIGHTING CIRCUIT COMPONENTS	93
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	87
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	87
J369	BENCH INTERNAL LIGHTING CIRCUIT COMPONENTS	87
H160	INSPECT AIRCRAFT BATTERIES	80
J388	PERFORM CAPACITANCE TESTS OR SERVICES ON NICKEL-CADMIUM BATTERIES	80
J336	BENCH CHECK CONSTANT SPEED DRIVE (CSD) COMPONENTS	80
E104	MAKE ENTRIES ON AF FORMS 2005 (ISSUE/TURN IN REQUEST)	80
L548	MAINTAIN BATTERY CHARGERS	80
E98	COMPLETE SUPPLY FORMS OR PARTS REQUESTS	80
K418	CLEAN CONNECTOR PLUGS	80
L527	INSPECT SHOP TEST EQUIPMENT OR TEST STANDS	80
K401	ASSEMBLE OR DISASSEMBLE CONNECTOR PLUGS	73
H208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	73
K433	CLEAN LEAD ACID BATTERIES	73
G152	INSPECT PARTS RECEIVED FOR SERVICEABILITY	67
K454	PERFORM SOLDERLESS CONNECTOR INSERTIONS OR EXTRACTIONS	67
H167	INSPECT BATTERY CHARGER SYSTEM CIRCUIT COMPONENTS	67
H194	INSPECT EXTERIOR LIGHTING CIRCUIT COMPONENTS	67
K446	FABRICATE WIRING HARNESSES	67
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	67
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	67
J385	BENCH CHECK WARNING LIGHT CIRCUIT COMPONENTS	60
G150	INSPECT ELECTRICAL SYSTEMS FOR CORROSION	60

TABLE A24

GROUP ID NUMBER AND TITLE: GRP254 Non-POMO Maintenance and Inspection Personnel

GROUP SIZE: N=32 PERCENT OF SAMPLE: 2%

AVERAGE GRADE: E-4 AVERAGE TICF: 30 Months

AVERAGE TAFMS: 46 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
K439	CRIMP WIRES TO SPLICES AND TERMINALS	97
K408	ASSEMBLE OR DISASSEMBLE NICKEL-CADMIUM BATTERIES	94
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	94
K473	REMOVE OR INSTALL CELLS ON NICKEL-CADMIUM BATTERIES	91
H160	INSPECT AIRCRAFT BATTERIES	91
K476	REMOVE OR INSTALL CONNECTORS ON NICKEL-CADMIUM BATTERIES	91
K475	REMOVE OR INSTALL CONNECTOR PLUGS	91
K434	CLEAN NICKEL CADMIUM BATTERIES	88
K454	PERFORM SOLDERLESS CONNECTOR INSERTIONS OR EXTRACTIONS	81
K458	REMOVE OR INSTALL ANTI-SKID CIRCUIT COMPONENTS	81
K455	PERFORM TCTO MODIFICATIONS OF AIRCRAFT ELECTRICAL SYSTEMS	81
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	78
K418	CLEAN CONNECTOR PLUGS	78
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	78
K401	ASSEMBLE OR DISASSEMBLE CONNECTOR PLUGS	75
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	75
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	75
H197	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	75
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	72
I286	ISOLATE MALFUNCTIONS ON INTERNAL LIGHTING CIRCUITS	69
H208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	69
I292	ISOLATE MALFUNCTIONS ON NESA GLASS ANTI-ICING CIRCUITS	69
I243	ISOLATE MALFUNCTIONS ON ANTI-SKID CIRCUITS	66
J388	PERFORM CAPACITANCE TESTS OR SERVICES ON NICKEL-CADMIUM BATTERIES	63
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	63
H227	INSPECT TRANSFORMER-RECTIFIER (TR) CIRCUIT COMPONENTS	63
K508	REMOVE OR INSTALL RHEOSTATS	59
H214	INSPECT NESA GLASS ANTI-ICING CIRCUIT COMPONENTS	59
K523	REPLACE MICRO SWITCHES	59
K525	REWIRE AIRCRAFT ELECTRICAL SYSTEMS	59
K433	CLEAN LEAD ACID BATTERIES	56

TABLE A25

GROUP ID NUMBER AND TITLE: GRP317 Battery Maintenance Specialists

GROUP SIZE: N=6 PERCENT OF SAMPLE: Less than 1%

AVERAGE GRADE: E-3 AVERAGE TICF: 25 Months

AVERAGE TAFMS: 38 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
J388	PERFORM CAPACITANCE TESTS OR SERVICES ON NICKEL-CADMIUM BATTERIES	100
K473	REMOVE OR INSTALL CELLS ON NICKEL-CADMIUM BATTERIES	100
K408	ASSEMBLE OR DISASSEMBLE NICKEL-CADIUM BATTERIES	100
H160	INSPECT AIRCRAFT BATTERIES	100
K439	CRIMP WIRES TO SPLICES AND TERMINALS	100
K476	REMOVE OR INSTALL CONNECTORS ON NICKEL-CADMIUM BATTERIES	100
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	100
K434	CLEAN NICKEL-CADMIUM BATTERIES	83
K433	CLEAN LEAD ACID BATTERIES	83
K475	REMOVE OR INSTALL CONNECTOR PLUGS	83
L548	MAINTAIN BATTERY CHARGERS	83
K455	PERFORM TCTO MODIFICATIONS OF AIRCRAFT ELECTRICAL SYSTEMS	83
H197	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	83
H208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	83
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	83
K453	PERFORM SOLDERING ON SOLID-STATE CIRCUIT BOARDS	83
J387	PERFORM CAPACITANCE TESTS ON LEAD ACID BATTERIES	67
K506	REMOVE OR INSTALL RELAYS IN CONTROL BOXES OR PANELS	67
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	67
K401	ASSEMBLE OR DISASSEMBLE CONNECTOR PLUGS	67
K447	INSPECT CONTROL BOXES OR JUNCTION BOXES FOR BURNING OR CHAFFING	67
L535	ISOLATE MALFUNCTIONS ON BATTERY CHANGERS	67
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	67
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	67
K513	REMOVE OR INSTALL SOLID-STATE COMPONENTS ON PRINTED CIRCUIT BOARDS	67
K512	REMOVE OR INSTALL SOLID-STATE CIRCUIT BOARDS	67
K446	FABRICATE WIRING HARNESSES	67
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	67
K402	ASSEMBLE OR DISASSEMBLE CONTROL BOXES	50
K403	ASSEMBLE OR DISASSEMBLE CONTROL PANELS	50
K454	PERFORM SOLDERLESS CONNECTOR INSERTIONS OR EXTRACTIONS	50

TABLE A26

GROUP ID NUMBER AND TITLE: GRP199 Troubleshooting and Inspection Cluster

GROUP SIZE: N=30 PERCENT OF SAMPLE: 2%

AVERAGE GRADE: E-4 AVERAGE TICF: 48 Months

AVERAGE TAFMS: 67 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	90
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	90
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	87
I239	ISOLATE MALFUNCTIONS ON AIRCRAFT AC POWER DISTRIBUTION CIRCUITS	87
I243	ISOLATE MALFUNCTIONS ON ANTI-SKID CIRCUITS	83
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	80
I234	ISOLATE MALFUNCTIONS ON AC GENERATOR SYSTEMS	77
H197	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	77
H212	INSPECT LANDING GEAR CONTROL AND WARNING CIRCUIT COMPONENTS	77
H194	INSPECT EXTERIOR LIGHTING CIRCUIT COMPONENTS	77
H208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	77
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	77
I290	ISOLATE MALFUNCTIONS ON LANDING GEAR CONTROL AND WARNING CIRCUITS	73
H229	INSPECT WARNING LIGHT CIRCUIT COMPONENTS	73
H163	INSPECT ALTERNATING CURRENT (AC) GENERATOR AND DISTRIBUTION SYSTEM CIRCUIT COMPONENTS	73
H224	INSPECT SPEED BRAKE CONTROL CIRCUIT COMPONENTS	73
I286	ISOLATE MALFUNCTIONS ON INTERNAL CIRCUITS	70
I303	ISOLATE MALFUNCTIONS ON SPEED BRAKE CONTROL CIRCUITS	70
H164	INSPECT ANTI-SKID CIRCUIT COMPONENTS	70
I293	ISOLATE MALFUNCTIONS ON NOSE-WHEEL STEERING CIRCUITS	67
G150	INSPECT ELECTRICAL SYSTEMS FOR CORROSION	67
I237	ISOLATE MALFUNCTIONS ON AIR REFUELING CIRCUITS	67
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	67
I271	ISOLATE MALFUNCTIONS ON EXTERNAL POWER SYSTEM CIRCUITS	60
G149	INSPECT AIRCRAFT ELECTRICAL SYSTEMS FOLLOWING MAINTENANCE	57
I240	ISOLATE MALFUNCTIONS ON AIRCRAFT DC POWER DISTRIBUTION	57
E105	MAKE ENTRIES ON AFTO FORMS 781 (AEROSPACE VEHICLE FLIGHT DATA DOCUMENT)	53
I258	ISOLATE MALFUNCTIONS OF CONSTANT SPEED DRIVE (CSD) CIRCUITS	53
K439	CRIMP WIRES TO SPLICES AND TERMINALS	53

TABLE A27

GROUP ID NUMBER AND TITLE: GRP384 Overseas OV-10 Maintenance Personnel

GROUP SIZE: N=5 PERCENT OF SAMPLE: Less than 1%

AVERAGE GRADE: E-4 AVERAGE TICF: 37 Months

AVERAGE TAFMS: 50 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
K539	CRIMP WIRES TO SPLICES AND TERMINALS	100
K401	ASSEMBLE OR DISASSEMBLE CONNECTOR PLUGS	100
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	100
I290	ISOLATE MALFUNCTIONS ON LANDING GEAR CONTROL AND WARNING CIRCUITS	100
K475	REMOVE OR INSTALL CONNECTOR PLUGS	100
K508	REMOVE OR INSTALL RHEOSTATS	100
K510	REMOVE OR INSTALL ROTATING BEACONS, LANDING LIGHTS, OR TAXI LIGHTS	100
H160	INSPECT AIRCRAFT BATTERIES	100
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	100
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	100
I240	ISOLATE MALFUNCTIONS ON AIRCRAFT DC POWER DISTRIBUTION	100
K456	POT CONNECTORS OR RELAYS	100
I276	ISOLATE MALFUNCTIONS ON FLAP AND SLAT CONTROL AND WARNING CIRCUITS	80
I286	ISOLATE MALFUNCTIONS ON INTERNAL LIGHTING CIRCUITS	80
E105	MAKE ENTIRES ON AFTO FORMS 781 (AEROSPACE VEHICLE FLIGHT DATA DOCUMENT)	80
I261	ISOLATE MALFUNCTIONS ON DC GENERATOR SYSTEMS	80
K454	PERFORM SOLDERLESS CONNECTOR INSERTIONS OR EXTRACTIONS	80
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	80
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	80
I241	ISOLATE MALFUNCTIONS ON AIRCRAFT FLIGHT CONTROL CIRCUITS	80
I305	ISOLATE MALFUNCTIONS ON THROTTLE POSITION WARNING CIRCUITS	80
H161	INSPECT AIRCRAFT DIRECT CURRENT (DC) POWER GENERATOR CIRCUIT AND DISTRIBUTION CIRCUIT COMPONENTS	80
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	80
E98	COMPLETE SUPPLY FORMS OR PARTS REQUESTS	80
I247	ISOLATE MALFUNCTIONS ON BATTERY DISTRIBUTION CIRCUITS	80
K418	CLEAN CONNECTOR PLUGS	80
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	80
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	80
E104	MAKE ENTRIES ON AF FORMS 2005 (ISSUE/TURN IN REQUEST)	60

TABLE A28

GROUP ID NUMBER AND TITLE: GRP387 Logistics Support Specialists

GROUP SIZE: N=10 PERCENT OF SAMPLE: Less than 1%

AVERAGE GRADE: E-4 AVERAGE TICF: 60 Months

AVERAGE TAFMS: 70 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
J336	BENCH CHECK CONSTANT SPEED DRIVE (CSD) COMPONENTS	100
I258	ISOLATE MALFUNCTIONS OF CONSTANT SPEED DRIVE (CSD) CIRCUITS	100
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	100
K401	ASSEMBLE OR DISASSEMBLE CONNECTOR PLUGS	100
K418	CLEAN CONNECTOR PLUGS	100
J384	BENCH CHECK TRANNSFORMER-RECTIFIER (TR) CIRCUIT CONVENTIONAL COMPONENTS	100
K454	PERFORM SOLDERLESS CONNECTOR INSERTIONS OR EXTRACTIONS	100
K512	REMOVE OR INSTALL SOLID-STATE CIRCUIT BOARDS	100
K475	REMOVE OR INSTALL CONNECTOR PLUGS	100
E95	COMPLETE CONDITION TAGS AND LABELS	100
K453	PERFORM SOLDERING ON SOLID-STATE CIRCUIT BOARDS	100
K439	CRIMP WIRES TO SPLICES AND TERMINALS	100
K446	FABRICATE WIRING HARNESSES	100
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	100
L527	INSPECT SHOP TEST EQUIPMENT OR TEST STANDS	100
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	100
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	100
L554	REWIRE OR REPLACE COMPONENTS ON LOCALLY MANUFACTURED TEST EQUIPMENT	100
K456	POT CONNECTORS OR RELAYS	100
K417	ASSEMBLE OR DISASSEMBLE TRANSFORMER-RECTIFIER (TR) UNITS	90
K392	ADJUST GOVERNORS ON CONSTANT SPEED DRIVE (CSD)	90
F117	BENCH CHECK AC GENERATORS WITH SOLID-STATE COMPONENTS	90
K504	REMOVE OR INSTALL PRESSURE SWITCHES ON CSDS	90
J385	BENCH CHECK WARNING LIGHT CIRCUIT COMPONENTS	90
K431	CLEAN INTERNAL PARTS OF TR UNITS	90
G150	INSPECT ELECTRICAL SYSTEMS FOR CORROSION	90
K523	REPLACE MICRO SWITCHES	90
E104	MAKE ENTRIES ON AF FORMS 2005 (ISSUE/TURN IN REQUEST)	90
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	90
K513	REMOVE OR INSTALL SOLID-STATE COMPONENTS ON PRINTED CIRCUIT BOARDS	90
L545	MAINTAIN AIRCRAFT GENERATOR TEST STANDS (VARI-DRIVES)	90

TABLE A29

GROUP ID NUMBER AND TITLE: GRP305 Lighting and Anti-Skid Circuit Specialists

GROUP SIZE: N=5 PERCENT OF SAMPLE: Less than 1%

AVERAGE GRADE: E-4 AVERAGE TICF: 43 Months

AVERAGE TAFMS: 72 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	100
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	100
I286	ISOLATE MALFUNCTIONS ON INTERNAL LIGHTING CIRCUITS	100
K458	REMOVE OR INSTALL ANTI-SKID COMPONENTS	100
I276	ISOLATE MALFUNCTIONS ON FLAP AND SLAT CONTROL AND WARNING LIGHTS	100
I284	ISOLATE MALFUNCTIONS ON INFLIGHT REFUELING (IFR) CIRCUITS	100
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	100
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	80
I234	ISOLATE MALFUNCTIONS ON AC GENERATOR SYSTEMS	80
I243	ISOLATE MALFUNCTIONS ON ANTI-SKID CIRCUITS	80
I290	ISOLATE MALFUNCTIONS ON LANDING GEAR CONTROL AND WARNING CIRCUITS	80
K439	CRIMP WIRES TO SPLICES AND TERMINALS	60
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	60
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	60
I304	ISOLATE MALFUNCTIONS ON TAIL HOOK CONTROL CIRCUITS	60
I278	ISOLATE MALFUNCTIONS ON FUEL CONTROL AND WARNING CIRCUITS	40
I239	ISOLATE MALFUNCTIONS ON AIRCRAFT AC POWER DISTRIBUTION CIRCUITS	40
I237	ISOLATE MALFUNCTIONS ON AIR REFUELING CIRCUITS	40
B40	SUPERVISE AIRCRAFT ELECTRICAL SYSTEMS SPECIALISTS (AFSC 42350)	40
G149	INSPECT AIRCRAFT ELECTRICAL SYSTEMS FOLLOWING MAINTENANCE	40
K510	REMOVE OR INSTALL ROTATING BEACONS, LANDING LIGHTS, OR TAXI LIGHTS	40
I271	ISOLATE MALFUNCTIONS ON EXTERNAL POWER SYSTEM CIRCUITS	40
C63	PREPARE AIRMAN PERFORMANCE REPORTS (APR)	40
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	40
K497	REMOVE OR INSTALL LANDING GEAR CONTROL HANDLES	40
I303	ISOLATE MALFUNCTIONS ON SPEED BRAKE CONTROL CIRCUITS	40
E94	COMPLETE AFTO FORMS 95 (SIGNIFICANT HISTORICAL DATA)	20
H159	INSPECT AIR REFUELING CIRCUIT COMPONENTS	20
E98	COMPLETE SUPPLY FORMS OR PARTS REQUESTS	20

TABLE A30

GROUP ID NUMBER AND TITLE: GRP098 Supervisory Cluster

GROUP SIZE: N=129 PERCENT OF SAMPLE: 7%

AVERAGE GRADE: E-6 AVERAGE TICF: 142 Months

AVERAGE TAFMS: 174 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
B23	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	96
C63	PREPARE AIRMAN PERFORMANCE REPORTS (APR)	92
B40	SUPERVISE AIRCRAFT ELECTRICAL SYSTEMS SPECIALISTS (AFSC 42350)	81
A5	DETERMINE WORK PRIORITIES	81
B36	INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	77
A14	PLAN OR SCHEDULE WORK ASSIGNMENTS	77
D84	MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	75
B21	COORDINATE WITH MAINTENANCE CONTROL ON MAINTENANCE ACTIVITIES	73
B24	DEVELOP OR IMPROVE WORK METHODS OR PROCEDURES	72
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	71
A18	SCHEDULE LEAVES OR PASSES	71
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	71
D74	COUNSEL TRAINEES ON TRAINING PROGRESS	70
A1	ASSIGN PERSONNEL TO DUTY POSITIONS	68
D76	DETERMINE TRAINING REQUIREMENTS	68
D75	DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	68
C60	INDORSE AIRMAN PERFORMANCE REPORTS (APR)	67
D86	REVIEW PROGRESS OF AIRMEN IN CAREER DEVELOPMENT COURSES (CDC)	66
D69	ASSIGN ON-THE-JOB TRAINING (OJT) TRAINERS	66
E105	MAKE ENTRIES ON AFTO FORMS 781 (AEROSPACE VEHICLE FLIGHT DATA DOCUMENT)	65
A4	DETERMINE REQUIREMENTS FOR PERSONNEL	65
C48	EVALUATE COMPLIANCE WITH WORK STANDARDS	64
G149	INSPECT AIRCRAFT ELECTRICAL SYSTEMS FOLLOWING MAINTENANCE	64
G153	OBSERVE IN-PROCESS MAINTENANCE OR MAKE ON THE SPOT CORRECTIVE ACTIONS	64
D71	CONDUCT OJT	63
E95	COMPLETE CONDITION TAGS AND LABELS	63
C44	ANALYZE WORKLOAD REQUIREMENTS	62
E101	INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	61

TABLE A31

GROUP ID NUMBER AND TITLE: GRP308 Line and Shop NCOICs

GROUP SIZE: N=51 PERCENT OF SAMPLE: 3%

AVERAGE GRADE: E-6 AVERAGE TICF: 146 Months

AVERAGE TAFMS: 169 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
C63	PREPARE AIRMAN PERFORMANCE REPORTS (APR)	100
B40	SUPERVISE AIRCRAFT ELECTRICAL SYSTEMS SPECIALISTS (AFSC 42350)	98
B23	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	98
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	98
B24	DEVELOP OR IMPROVE WORK METHODS OR PROCEDURES	98
A5	DETERMINE WORK PRIORITIES	94
D75	DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	94
D71	CONDUCT OJT	94
E95	COMPLETE CONDITION TAGS AND LABELS	94
H160	INSPECT AIRCRAFT BATTERIES	92
E101	INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	92
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	92
D76	DETERMINE TRAINING REQUIREMENTS	90
A14	PLAN OR SCHEDULE WORK ASSIGNMENTS	88
E98	COMPLETE SUPPLY FORMS OR PARTS REQUESTS	88
L527	INSPECT SHOP TEST EQUIPMENT OR TEST STANDS	88
D84	MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	88
C44	ANALYZE WORKLOAD REQUIREMENTS	88
A3	DETERMINE REQUIREMENTS FOR MAINTENANCE OF EQUIPMENT	88
H208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	88
G154	PERFORM MAINTENANCE ACTIVITY INSPECTIONS OR SELF-INSPECTIONS	86
B21	COORDINATE WITH MAINTENANCE CONTROL ON MAINTENANCE ACTIVITIES	84
E104	MAKE ENTRIES ON AF FORMS 2005 (ISSUE/TURN IN REQUEST)	84
D86	REVIEW PROGRESS OF AIRMEN IN CAREER DEVELOPMENT COURSES (CDC)	84
D69	ASSIGN ON-THE-JOB TRAINING (OJT) TRAINERS	84
H194	INSPECT EXTERIOR LIGHTING CIRCUIT COMPONENTS	84
C48	EVALUATE COMPLIANCE WITH WORK STANDARDS	82
B36	INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	82
A1	ASSIGN PERSONNEL TO DUTY POSITIONS	82
A4	DETERMINE REQUIREMENTS FOR PERSONNEL	82

TABLE A32

GROUP ID NUMBER AND TITLE: GRP165 Branch and Senior NCOICs

GROUP SIZE: N=41 PERCENT OF SAMPLE: 2%

AVERAGE GRADE: E-7 AVERAGE TICF: 164 Months

AVERAGE TAFMS: 198 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
B36	INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	95
B23	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	95
C52	EVALUATE INSPECTION REPORTS OR PROCEDURES	90
C63	PREPARE AIRMAN PERFORMANCE REPORTS (APR)	88
B28	DRAFT CORRESPONDENCE	85
B20	CONDUCT OR PARTICIPATE IN STAFF MEETINGS	85
C60	INDORSE AIRMAN PERFORMANCE REPORTS (APR)	83
A18	SCHEDULE LEAVES OR PASSES	83
C51	EVALUATE INDIVIDUALS FOR PROMOTION, DEMOTION, OR RECLASSIFICATION	83
A1	ASSIGN PERSONNEL TO DUTY POSITIONS	78
A5	DETERMINE WORK PRIORITIES	78
C48	EVALUATE COMPLIANCE WITH WORK STANDRDS	78
B24	DEVELOP OR IMPROVE WORK METHODS OR PROCEDURES	78
A4	DETERMINE REQUIREMENTS FOR PERSONNEL	76
C59	EVALUATE WORK SCHEDULES	76
D84	MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	76
A14	PLAN OR SCHEDULE WORK ASSIGNMENTS	73
B21	COORDINATE WITH MAINTENANCE CONTROL ON MAINTENANCE ACTIVITIES	73
D69	ASSIGN ON-THE-JOB TRAINING (OJT) TRAINERS	73
A2	ASSIGN SPONSORS FOR NEW PERSONNEL	73
B43	SUPERVISE PERSONNEL OTHER THAN AFSC 423X0	71
C49	EVALUATE EXCEPTION TIME ACCOUNTING (ETA) OR MAINTENANCE DATA COLLECTION (MDC) INFORMATION	71
C54	EVALUATE MAINTENANCE AND USE OF WORKSPACE, EQUIPMENT, OR SUPPLIES	71
C44	ANALYZE WORKLOAD REQUIREMENTS	68
A10	ESTABLISH PERSONNEL PERFORMANCE STANDARDS	68
B41	SUPERVISE AIRCRAFT ELECTRICAL TECHNICIANS (AFSC 42370)	66
D76	DETERMINE TRAINING REQUIREMENTS	66
A13	PLAN OR PREPARE BRIEFINGS	66
G154	PERFORM MAINTENANCE ACTIVITY INSPECTIONS OR SELF-INSPECTIONS	63
C45	EVALUATE ADMINISTRATIVE FORMS, FILES, OR PROCEDURES	63

TABLE A33

GROUP ID NUMBER AND TITLE: GRP123 Specialist Flightline Supervisors

GROUP SIZE: N=35 PERCENT OF SAMPLE: 2%

AVERAGE GRADE: E-6 AVERAGE TICF: 115 Months

AVERAGE TAFMS: 158 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
B23	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	94
B40	SUPERVISE AIRCRAFT ELECTRICAL SYSTEMS SPECIALISTS (AFSC 42350)	89
C63	PREPARE AIRMAN PERFORMANCE REPORTS (APR)	89
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	77
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	74
G149	INSPECT AIRCRAFT ELECTRICAL SYSTEMS FOLLOWING MAINTENANCE	74
D74	COUNSEL TRAINEES ON TRAINING PROGRESS	71
E105	MAKE ENTRIES ON AFTO FORMS 781 (AEROSPACE VEHICLE FLIGHT DATA DOCUMENT)	69
A5	DETERMINE WORK PRIORITIES	66
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	66
A14	PLAN OR SCHEDULE WORK ASSIGNMENTS	63
I234	ISOLATE MALFUNCTIONS ON AC GENERATOR SYSTEMS	63
I290	ISOLATE MALFUNCTIONS ON LANDING GEAR CONTROL AND WARNING CIRCUITS	63
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	63
B39	SUPERVISE AIRCRAFT ELECTRICAL SYSTEMS HELPERS (AFSC 42330)	57
B21	COORDINATE WITH MAINTENANCE CONTROL ON MAINTENANCE ACTIVITIES	57
G153	OBSERVE IN-PROCESS MAINTENANCE OR MAKE ON THE SPOT CORRECTIVE ACTIONS	57
D84	MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	57
I239	ISOLATE MALFUNCTIONS ON AIRCRAFT AC POWER DISTRIBUTION CIRCUITS	57
D75	DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	54
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	51
I241	ISOLATE MALFUNCTIONS ON AIRCRAFT FLIGHT CONTROL CIRCUITS	51
I286	ISOLATE MALFUNCTIONS ON INTERNAL LIGHTING CIRCUITS	51
I240	ISOLATE MALFUNCTIONS ON AIRCRAFT DC POWER DISTRIBUTION	51
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	51
B43	SUPERVISE PERSONNEL OTHER THAN AFSC 423X0	49
E95	COMPLETE CONDITION TAGS AND LABELS	49
H212	INSPECT LANDING GEAR CONTROL AND WARNING CIRCUIT COMPONENTS	49

TABLE A34

GROUP ID NUMBER AND TITLE: GRP094 Quality Control Inspectors Cluster

GROUP SIZE: N=20 PERCENT OF SAMPLE: 1%

AVERAGE GRADE: E-6 AVERAGE TICF: 129 Months

AVERAGE TAFMS: 138 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
G149	INSPECT AIRCRAFT ELECTRICAL SYSTEMS FOLLOWING MAINTENANCE	95
G150	INSPECT ELECTRICAL SYSTEMS FOR CORROSION	95
H164	INSPECT ANTI-SKID CIRCUIT COMPONENTS	95
H227	INSPECT TRANSFORMER-RECTIFIER (TR) CIRCUIT COMPONENTS	95
H163	INSPECT ALTERNATING CURRENT (AC) GENERATOR AND DISTRIBUTION SYSTEM CIRCUIT COMPONENTS	90
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	85
H212	INSPECT LANDING GEAR CONTROL AND WARNING CIRCUIT COMPONENTS	85
H195	INSPECT EXTERNAL POWER SYSTEM CIRCUIT COMPONENTS	85
H178	INSPECT CONSTANT SPEED DRIVE (CSD) CIRCUIT COMPONENTS	80
H197	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	80
H208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	80
H194	INSPECT EXTERIOR LIGHTING CIRCUIT COMPONENTS	80
H165	INSPECT AUXILIARY POWER UNIT (APU) CIRCUIT COMPONENTS	80
G153	OBSERVE IN-PROCESS MAINTENANCE OR MAKE ON THE SPOT CORRECTIVE ACTIONS	75
G155	PERFORM SPECIAL INSPECTIONS OF AIRCRAFT ELECTRICAL SYSTEMS	75
G154	PERFORM MAINTENANCE ACTIVITY INSPECTIONS OR SELF-INSPECTIONS	75
H160	INSPECT AIRCRAFT BATTERIES	75
E105	MAKE ENTRIES ON AFTO FORMS 781 (AEROSPACE VEHICLE FLIGHT DATA DOCUMENT)	75
H214	INSPECT NESA GLASS ANTI-ICING CIRCUIT COMPONENTS	75
H167	INSPECT CHARGER SYSTEM CIRCUIT COMPONENTS	75
H180	INSPECT CREW ENTRY DOOR CONTROL AND WARNING CIRCUITS	75
H187	INSPECT ELECTRICAL POWER INDICATING INSTRUMENT CIRCUIT COMPONENTS, SUCH AS VOLTMETERS AND LOADMETERS	65
H228	INSPECT TRUCK LEVELING SYSTEM CIRCUIT COMPONENTS	65
H188	INSPECT ELECTRICALLY OPERATED HYDRAULIC PUMP CIRCUIT COMPONENTS	65
C48	EVALUATE COMPLIANCE WITH WORK STANDARDS	60
D75	DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	60
H229	INSPECT WARNING LIGHT CIRCUIT COMPONENTS	60
H199	INSPECT FLAP AND SLAT CONTROL AND WARNING CIRCUIT COMPONENTS	60
C62	INVESTIGATE ACCIDENTS OR INCIDENTS	50

TABLE A35

GROUP ID NUMBER AND TITLE: GRP421 FTD Instructors

GROUP SIZE: N=5 PERCENT OF SAMPLE: Less than 1%

AVERAGE GRADE: E-6 AVERAGE TICF: 175 Months

AVERAGE TAFMS: 185 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
D70	CONDUCT FIELD TRAINING DETACHMENT (FTD) CLASSROOM TRAINING	100
D75	DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	100
D77	DEVELOP COURSE CURRICULA, PLANS OF INSTRUCTION (POI), OR SPECIALTY TRAINING STANDARDS (STS)	100
E103	MAINTAIN TECHNICAL ORDER (TO) FILES OR TO COMPLIANCE RECORDS	100
D68	ADMINISTER OR SCORE TESTS	100
G150	INSPECT ELECTRICAL SYSTEMS FOR CORROSION	100
D85	PROCURE TRAINING AIDS, SPACE, OR EQUIPMENT	100
G149	INSPECT AIRCRAFT ELECTRICAL SYSTEMS FOLLOWING MAINTENANCE	100
H164	INSPECT ANTI-SKID CIRCUIT COMPONENTS	100
B23	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	100
H212	INSPECT LANDING GEAR CONTROL AND WARNING CIRCUIT COMPONENTS	100
H195	INSPECT EXTERNAL POWER SYSTEM CIRCUIT COMPONENTS	100
H227	INSPECT TRANSFORMER-RECTIFIER (TR) CIRCUIT COMPONENTS	100
H208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	100
H167	INSPECT BATTERY CHARGER SYSTEM CIRCUIT COMPONENTS	100
H165	INSPECT AUXILIARY POWER UNIT (APU) CIRCUIT COMPONENTS	100
H180	INSPECT CREW ENTRY DOOR CONTROL AND WARNING CIRCUITS	100
H214	INSPECT NESA GLASS ANTI-ICING CIRCUIT COMPONENTS	100
H228	INSPECT TRUCK LEVELING SYSTEM CIRCUIT COMPONENTS	100
H188	INSPECT ELECTRICALLY OPERATED HYDRAULIC PUMP CIRCUIT COMPONENTS	100
D84	MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	80
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	80
D88	WRITE TEST QUESTIONS OR DEVELOP TESTS	80
H187	INSPECT ELECTRICAL POWER INDICATING INSTRUMENT CIRCUIT COMPONENTS, SUCH AS VOLTMETERS AND LOADMETERS	80
E102	MAINTAIN PUBLICATION LIBRARIES	80
H178	INSPECT CONSTANT SPEED DRIVE (CSD) CIRCUIT COMPONENTS	80
H229	INSPECT WARNING LIGHT CIRCUIT COMPONENTS	80
H199	INSPECT FLAP AND SLAT CONTROL AND WARNING CIRCUIT COMPONENTS	80
E105	MAKE ENTRIES ON AFTO FORMS 781 (AEROSPACE VEHICLE FLIGHT DATA DOCUMENT)	80

TABLE A36

GROUP ID NUMBER AND TITLE: GRP065 Depot Level Maintenance Cluster

GROUP SIZE: N=31 PERCENT OF SAMPLE: 2%

AVERAGE GRADE: E-4 AVERAGE TICF: 47 Months

AVERAGE TAFMS: 59 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
K475	REMOVE OR INSTALL CONNECTOR PLUGS	84
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	84
K439	CRIMP WIRES TO SPLICES AND TERMINALS	84
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	84
K525	REWIRE AIRCRAFT ELECTRICAL SYSTSEMS	61
K454	PERFORM SOLDERLESS CONNECTOR INSERTIONS OR EXTRACTIONS	61
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	58
K455	PERFORM TCTO MODIFICATIONS OF AIRCRAFT ELECTRICAL SYSTEMS	55
K418	CLEAN CONNECTOR PLUGS	55
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	55
K401	ASSEMBLE OR DISASSEMBLE CONNECTOR PLUGS	52
K446	FABRICATE WIRING HARNESSES	48
K506	REMOVE OR INSTALL RELAYS IN CONTROL BOXES OR PANELS	48
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	45
K402	ASSEMBLE OR DISASSEMBLE CONTROL BOXES	45
E98	COMPLETE SUPPLY FORMS OR PARTS REQUESTS	45
K441	FABRICATE COMPACT WIRE BUNDLES	42
K438	CRIMP WIRES TO CONVERTER PLUG PINS	42
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	42
E101	INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	42
K521	REPLACE COMPACT WIRE BUNDLES	39
K442	FABRICATE ELECTRICAL LEADS	39
K422	CLEAN INTERNAL PARTS OF CONTROL BOXES	39
G150	INSPECT ELECTRICAL SYSTEMS FOR CORROSION	39
K507	REMOVE OR INSTALL RESISTORS OR CAPACITORS ON CONVENTIONAL CIRCUITS	39
K452	PERFORM PROTO-TYPE TIME COMPLIANCE TECHNICAL ORDERS (TCTO)	35
J352	BENCH CHECK EXTERNAL LIGHTING CIRCUIT COMPONENTS	35
G152	INSPECT PARTS RECEIVED FOR SERVICEABILITY	35
H194	INSPECT EXTERIOR LIGHTING CIRCUIT COMPONENTS	35
K403	ASSEMBLE OR DISASSEMBLE CONTROL PANELS	35
K447	INSPECT CONTROL BOXES OR JUNCTION BOXES FOR BURNING OR CHAFFING	32
K519	REMOVE OR INSTALL WIRING IN CONTROL BOXES OR PANELS	32

TABLE A37

GROUP ID NUMBER AND TITLE: GRP207 Solid State Component and Test Equipment Maintenance

GROUP SIZE: N=5 PERCENT OF SAMPLE: Less than 1%

AVERAGE GRADE: E-4 AVERAGE TICF: 66 Months

AVERAGE TAFMS: 76 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
K513	REMOVE OR INSTALL SOLID-STATE COMPONENTS ON PRINTED CIRCUIT BOARDS	100
F147	REMOVE OR INSTALL RESISTORS OR CAPACITORS ON SOLID-STATE CIRCUIT BOARDS	100
K422	CLEAN INTERNAL PARTS OF CONTROL BOXES	100
K453	PERFORM SOLDERING ON SOLID-STATE CIRCUIT BOARDS	100
K512	REMOVE OR INSTALL SOLID-STATE CIRCUIT BOARDS	100
F115	BENCH CHECK AC CONTROL PANEL SOLID-STATE COMPONENTS	100
J352	BENCH CHECK EXTERNAL LIGHTING CIRCUIT COMPONENTS	100
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	100
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	100
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	80
K402	ASSEMBLE OR DISASSEMBLE CONTROL BOXES	80
K475	REMOVE OR INSTALL CONNECTOR PLUGS	80
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	80
K454	PERFORM SOLDERLESS CONNECTOR INSERTIONS OR EXTRACTIONS	80
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	80
L527	INSPECT SHOP TEST EQUIPMENT OR TEST STANDS	80
K418	CLEAN CONNECTOR PLUGS	80
K523	REPLACE MICRO SWITCHES	80
J324	BENCH CHECK ANTI-SKID CONVENTIONAL COMPONENTS	80
F120	BENCH CHECK ANTI-SKID SOLID-STATE COMPONENTS	80
F136	BENCH CHECK OVERHEAT WARNING CIRCUIT SOLID-STATE COMPONENTS	80
K439	CRIMP WIRES TO SPLICES AND TERMINALS	80
E104	MAKE ENTRIES ON AF FORMS 2005 (ISSUE/TURN IN REQUEST)	80
K432	CLEAN INTERNAL PARTS OF VOLTAGE REGULATORS	80
E98	COMPLETE SUPPLY FORMS OR PARTS REQUESTS	80
K423	CLEAN INTERNAL PARTS OF CONTROL PANELS	80
K401	ASSEMBLE OR DISASSEMBLE CONNECTOR PLUGS	60
J369	BENCH CHECK INTERNAL LIGHTING CIRCUIT COMPONENTS	60
K458	REMOVE OR INSTALL ANTI-SKID CIRCUIT COMPONENTS	60
F118	BENCH CHECK AC POWER DISTRIBUTION SOLID-STATE COMPONENTS	60

TABLE A38

GROUP ID NUMBER AND TITLE: GRP261 General Aircraft Electrical Systems Maintenance

GROUP SIZE: N=11 PERCENT OF SAMPLE: Less than 1%

AVERAGE GRADE: E-4 AVERAGE TICF: 52 Months

AVERAGE TAFMS: 56 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
K455	PERFORM TCTO MODIFICATIONS OF AIRCRAFT ELECTRICAL SYSTEMS	100
K439	CRIMP WIRES TO SPLICES AND TERMINALS	100
K525	REWIRE AIRCRAFT ELECTRICAL SYSTEMS	100
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	100
K446	FABRICATE WIRING HARNESSES	100
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	91
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	91
K475	REMOVE OR INSTALL CONNECTOR PLUGS	82
K452	PERFORM PROTO-TYPE TIME COMPLIANCE TECHNICAL ORDERS (TCTO)	82
K438	CRIMP WIRES TO CONVERTER PLUG PINS	82
K402	ASSEMBLE OR DISASSEMBLE CONTROL BOXES	82
K454	PERFORM SOLDERLESS CONNECTOR INSERTIONS OR EXTRACTIONS	73
K401	ASSEMBLE OR DISASSEMBLE CONNECTOR PLUGS	73
K521	REPLACE COMPACT WIRE BUNDLES	73
K418	CLEAN CONNECTOR PLUGS	73
K506	REMOVE OR INSTALL RELAYS IN CONTROL BOXES OR PANELS	73
K437	CRIMP KAPTON WIRE TO CONVERTOR PLUG PINS	64
K447	INSPECT CONTROL BOXES OR JUNCTION BOXES FOR BURNING OR CHAFFING	64
K441	FABRICATE COMPACT WIRE BUNDLES	64
K519	REMOVE OR INSTALL WIRING IN CONTROL BOXES OR PANELS	64
K442	FABRICATE ELECTRICAL LEADS	64
K403	ASSEMBLE OR DISASSEMBLE CONTROL PANELS	64
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	64
G150	INSPECT ELECTRICAL SYSTEMS FOR CORROSION	55
K507	REMOVE OR INSTALL RESISTORS OR CAPACITORS ON CONVENTIONAL CIRCUITS	55
K456	POT CONNECTORS OR RELAYS	45
K422	CLEAN INTERNAL PARTS OF CONTROL BOXES	45
K440	FABRICATE BONDINGS	45
G149	INSPECT AIRCRAFT ELECTRICAL SYSTEMS FOLLOWING MAINTENANCE	45
K423	CLEAN INTERNAL PARTS OF CONTROL PANELS	45
G152	INSPECT PARTS RECEIVED FOR SERVICEABILITY	45
E101	INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	45

TABLE A39

GROUP ID NUMBER AND TITLE: GRP233 Line Quality Control Personnel

GROUP SIZE: N=5 PERCENT OF SAMPLE: Less than 1%

AVERAGE GRADE: E-5 AVERAGE TICF: 89 Months

AVERAGE TAFMS: 104 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
G150	INSPECT ELECTRICAL SYSTEMS FOR CORROSION	100
G149	INSPECT AIRCRAFT ELECTRICAL SYSTEMS FOLLOWING MAINTENANCE	100
G154	PERFORM MAINTENANCE ACTIVITY INSPECTIONS OR SELF-INSPECTIONS	100
G153	OBSERVE IN-PROCESS MAINTENANCE OR MAKE ON THE SPOT CORRECTIVE ACTIONS	80
G155	PERFORM SPECIAL INSPECTIONS OF AIRCRAFT ELECTRICAL SYSTEMS	80
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	60
E101	INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	60
G148	INITIATE MATERIAL DEFICIENCY REPORTS	40
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	40
K475	REMOVE OR INSTALL CONNECTOR PLUGS	40
B39	SUPERVISE AIRCRAFT ELECTRICAL SYSTEMS HELPERS (AFSC 42330)	20
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	20
E105	MAKE ENTRIES ON AFTO FORMS 781 (AEROSPACE VEHICLE FLIGHT DATA DOCUMENT)	20
K418	CLEAN CONNECTOR PLUGS	20
K439	CRIMP WIRES TO SPLICES AND TERMINALS	20
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	20
C48	EVALUATE COMPLIANCE WITH WORK STANDARDS	20
C63	PREPARE AIRMAN PERFORMANCE WRPORTS (APR)	20
E98	COMPLETE SUPPLY FORMS OR PARTS REQUESTS	20
K456	POT CONNECTORS OR RELAYS	20
B36	INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	20
C52	EVALUATE INSPECTION REPORTS OR PROCEDURES	20
A10	ESTABLISH PERSONNEL PERFORMANCE STANDARDS	20
C44	ANALYZE WORKLOAD REQUIREMENTS	20
G151	INSPECT IN-SHOP REPAIR OF AEROSPACE GROUND EQUIPMENT (AGE) EQUIPMENT MAINTENANCE	20
G152	INSPECT PARTS RECEIVED FOR SERVICEABILITY	20
C57	EVALUATE SUGGESTIONS	20
A3	DETERMINE REQUIREMENTS FOR MAINTENANCE OR EQUIPMENT	20
A16	PLAN UNSATISFACTORY REPORT PROCEDURES	20

TABLE A40

GROUP ID NUMBER AND TITLE: GRP029 Trainer Cluster

GROUP SIZE: N=40 PERCENT OF SAMPLE: 2%

AVERAGE GRADE: E-6 AVERAGE TICF: 136 Months

AVERAGE TAFMS: 144 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
D74	COUNSEL TRAINEES ON TRAINING PROGRESS	72
D75	DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	67
D68	ADMINISTER OR SCORE TESTS	65
B23	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	65
D84	MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	50
D77	DEVELOP COURSE CURRICULA, PLANS OF INSTRUCTION (POI), OR SPECIALTY TRAINING STANDARDS (STS)	50
E103	MAINTAIN TECHNICAL ORDER (TO) FILES OR TO COMPLIANCE RECORDS	47
B36	INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	47
D88	WRITE TEST QUESTIONS OR DEVELOP TESTS	47
D70	CONDUCT FIELD TRAINING DETACHMENT (FTD) CLASSROOM TRAINING	45
B20	CONDUCT OR PARTICIPATE IN STAFF MEETINGS	45
B24	DEVELOP OR IMPROVE METHODS OR PROCEDURES	45
D79	ESTABLISH OR MAINTAIN STUDY REFERENCE FILES	40
D76	DETERMINE TRAINING REQUIREMENTS	40
D72	CONDUCT RESIDENT COURSE CLASSROOM TRAINING	38
A13	PLAN OR PREPARE BRIEFINGS	38
B28	DRAFT CORRESPONDENCE	35
D73	CONDUCT TRAINING CONFERENCES OR BRIEFINGS	32
D85	PROCURE TRAINING AIDS, SPACE, OR EQUIPMENT	32
D82	EVALUATE PROGRESS OF RESIDENT COURSE STUDENTS	30
E95	COMPLETE CONDITION TAGS AND LABELS	27
E106	MAKE ENTRIES ON AGE FORMS, SUCH AS NONPOWERED RECORD FORMS	25
E90	COMPLETE AF FORMS 1492 (DANGER)	25
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	25
E101	INVENTORY EQUIPMENT TOOLS, OR SUPPLIES	22
B43	SUPERVISE PERSONNEL OTHER THAN AFSC 423X0	22
B40	SUPERVISE AIRCRAFT ELECTRICAL SYSTEMS SPECIALISTS (AFSC 42350)	22
D83	EVALUATE RESIDENT COURSE TRAINING	20
B31	IMPLEMENT GROUND SAFETY PROGRAMS OR PROCEDURES	20
C57	EVALUATE SUGGESTIONS	20
C63	PREPARE AIRMAN PERFORMANCE REPORTS (APR)	20

TABLE A41

GROUP ID NUMBER AND TITLE: GRP073 FTD Instructors

GROUP SIZE: N=18 PERCENT OF SAMPLE: 1%

AVERAGE GRADE: E-6 AVERAGE TICF: 171 Months

AVERAGE TAFMS: 180 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
D70	CONDUCT FIELD TRAINING DETACHMET (FTD) CLASSROOM TRAINING	100
D75	DEMONSTRATE HOT TO LOCATE TECHNICAL INFORMATION	94
E103	MAINTAIN TECHNICAL ORDER (TO) FILES OR TO COMPLIANCE RECORDS	83
D77	DEVELOP COURSE CURRICULA, PLANS OF INSTRUCTION (POI), OR SPECIALTY TRAINING STANDARDS (STS)	83
D74	COUNSEL TRAINEES ON TRAINING PROGRESS	72
D68	ADMINISTER OR SCORE TESTS	61
B23	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	61
D79	ESTABLISH OR MAINTAIN STUDY REFERENCE FILES	56
E95	COMPLETE CONDITION TAGS AND LABELS	56
E90	COMPLETE AF FORMS 1492 (DANGER)	56
D88	WRITE TEST QUESTIONS OR DEVELOP TESTS	50
E106	MAKE ENTRIES ON AGE FORMS SUCH AS NONPOWERED RECORD FORMS	50
D76	DETERMINE TRAINING REQUIREMENTS	44
B43	SUPERVISE PERSONAL OTHER THAN AFSC 423X0	44
B24	DEVELOP OR IMPROVE WORK METHODS OR PROCEDURES	44
B28	DRAFT CORRESPONDENCE	39
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	39
B31	IMPLEMENT GROUND SFETY PROGRAMS OR PROCEDURES	33
C48	EVALUATE COMPLIANCE WITH WORK STANDARDS	33
D73	CONDUCT TRAINING CONFERENCES OR BRIEFINGS	33
B36	INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	33
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	33
E105	MAKE ENTRIES ON AFTO FORMS 781 (AEROSPACE VEHICLE FLIGHT DATA DOCUMENT)	33
E94	COMPLETE AFTO FORMS 95 (SIGNIFICANT HISTORICAL DATA)	33
D84	MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	28
C63	PREPARE AIRMAN PERFORMANCE REPORTS (APR)	28
E101	INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	28
D80	EVALUATE FIELD TRAINING DETACHMENT (FTD) TRAINING	28
D85	PROCURE TRAINING AIDS, SPACE, OR EQUIPMENT	28
B40	SUPERVISE AIRCRAFT ELECTRICAL SYSTEMS SPECIALISTS (AFSC 42350)	28

TABLE A42

GROUP ID NUMBER AND TITLE: GRP120 In-Residence Training Instructors

GROUP SIZE: N=16 PERCENT OF SAMPLE: 1%

AVERAGE GRADE: E-5 AVERAGE TICF: 82 Months

AVERAGE TAFMS: 88 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
D68	ADMINISTER OR SCORE TESTS	94
D74	COUNSEL TRAINEES ON TRAINING PROGRESS	94
D84	MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	88
D72	CONDUCT RESIDENT COURSE CLASSROOM TRAINING	75
B23	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	75
D82	EVALUATE PROGRESS OF RESIDENT COURSE STUDENTS	63
D75	DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	56
D88	WRITE TEST QUESTIONS OR DEVELOP TESTS	56
B36	INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	56
D85	PROCURE TRAINING AIDS, SPACE, OR EQUIPMENT	50
B20	CONDUCT OR PARTICIPATE IN STAFF MEETINGS	50
A13	PLAN OR PREPARE BRIEFINGS	50
D76	DETERMINE TRAINING REQUIREMENTS	44
B24	DEVELOP OR IMPROVE WORK METHODS OR PROCEDURES	44
D86	REVIEW PROGRESS OF AIRMEN IN CAREER DEVELOPMENT COURSES (CDC)	38
D73	CONDUCT TRAINING CONFERENCES OR BRIEFINGS	38
D79	ESTBLISH OR MAINTAIN STUDY REFERENCE FILES	31
D78	DIRECT OR IMPLEMENT OJT TRAINING PROGRAMS	31
D83	EVALUATE RESIDENT COURSE TRAINING	31
D77	DEVELOP COURSE CURRICULA, PLANS OF INSTRUCTION (POI), OR SPECIALTY TRAINING STANDARDS (STS)	25
E101	INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	25
B21	COORDINATE WITH MAINTENANCE CONTROL ON MAINTENANCE ACTIVITIES	25
E103	MAINTAIN TECHNICAL ORDER (TO) FILES OR TO COMPLIANCE RECORDS	19
C45	EVALUATE ADMINISTRATIVE FORMS, FILES, OR PROCEDURES	19
B40	SUPERVISE AIRCRAFT ELECTRICAL SYSTEMS SPECIALISTS (AFSC 42350)	19
D71	CONDUCT OJT	19
A10	ESTABLISH PERSONNEL PERFORMANCE STANDARDS	19
D69	ASSIGN ON-THE-JOB TRAINING (OJT) TRAINERS	19
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	19

TABLE A43

GROUP ID NUMBER AND TITLE: GRP015 Maintenance Control and Scheduling Cluster

GROUP SIZE: N=26 PERCENT OF SAMPLE: 1%

AVERAGE GRADE: E-6 AVERAGE TICF: 157 Months

AVERAGE TAFMS: 174 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
B21	COORDINATE WITH MAINTENANCE CONTROL ON MAINTENANCE ACTIVITIES	65
A5	DETERMINE WORK PRIORITIES	50
B43	SUPERVISE PERSONNEL OTHER THAN AFSC 423X0	46
B22	COORDINATE WITH MATERIAL CONTROL ON CANNIBALIZATION OF PARTS	46
B27	DIRECT MAINTENANCE OR UTILIZATION OF EQUIPMENT	38
B36	INTERPRET POLICIES, DIRECTIVES,OR PROCEDURES FOR SUBORDINATES	38
B25	DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS	35
B20	CONDUCT OR PARTICIPATE IN STAFF MEETINGS	35
E105	MAKE ENTRIES ON AFTO FORMS 781 (AEROSPACE VEHICLE FLIGHT DATA DOCUMENT)	35
A14	PLAN OR SCHEDULE WORK ASSIGNMENTS	31
C44	ANALYZE WORKLOAD REQUIREMENTS	27
B23	COUNSEL PERSONNEL ONPERSONAL OR MILITARY-RELATED MATTERS	27
B24	DEVELOP OR IMPROVE WORK METHODS OR PROCEDURES	27
C48	EVALUATE COMPLIANCE WITH WORK STANDARDS	23
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	23
C63	PREPARE AIRMAN PERFORMANCE REPORTS (APR)	23
B31	IMPLEMENT GROUND SAFETY PROGRAMS OR PROCEDURES	19
C46	EVALUATE ALERT OR EMERGENCY PROCEDURES	19
A4	DETERMINE REQUIREMENTS FOR PERSONNEL	19
B28	DRAFT CORRESPONDENCE	19
C60	INDORSE AIRMAN PERFORMANCE REPORTS (APR)	19
E90	COMPLETE AF FORMS 1492 (DANGER)	19
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	19
E104	MAKE ENTRIES ON AF FORMS 2005 (ISSUE/TURN IN REQUEST)	15
C62	INVESTIGATE ACCIDENTS OR INCIDENTS	15
E98	COMPLETE SUPPLY FORMS OR PARTS REQUESTS	15
B37	MAINTAIN OR UPDATE CONTINGENCY PLANS	15
A9	DRAFT OR UPDATE STANDING OPERATING PROCEDURES (SOP)	15
D75	DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	15

TABLE A44

GROUP ID NUMBER AND TITLE: GRP323 Schedulers

GROUP SIZE: N=5 PERCENT OF SAMPLE: Less than 1%

AVERAGE GRADE: E-6 AVERAGE TICF: 181 Months

AVERAGE TAFMS: 196 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
B25	DIRECT DEVELOPMENT OR MAINTENANCE OF STATUS BOARDS, GRAPHS, OR CHARTS	100
B22	COORDINATE WITH MATERIAL CONTROL ON CANNIBALIZATION OF PARTS	100
B21	COORDINATE WITH MAINTENANCE CONTROL ON MAINTENANCE ACTIVITIES	80
C46	EVALUATE ALERT OR EMERGENCY PROCEDURES	80
A5	DETERMINE WORK PRIORITIES	60
C44	ANALYZE WORKLOAD REQUIREMENTS	60
A14	PLAN OR SCHEDULE WORK ASSIGNMENTS	60
A4	DETERMINE REQUIREMENTS FOR PERSONNEL	60
B36	INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	60
A13	PLAN OR PREPARE BRIEFINGS	60
B43	SUPERVISE PERSONNEL OTHER THAN AFSC 423X0	40
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	40
E100	INITIATE WORK ORDER REQUESTS	40
E98	COMPLETE SUPPLY FORMS OR PARTS REQUESTS	40
B20	CONDUCT OR PARTICIPATE IN STAFF MEETINGS	40
B27	DIRECT MAINTENANCE OR UTILIZATION OF EQUIPMENT	40
B28	DRAFT CORRESPONDENCE	40
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	40
B23	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	40
C63	PREPARE AIRMAN PERFORMANCE REPORTS (APR)	40
D84	MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	40
E104	MAKE ENTRIES ON AF FORMS 2005 (ISSUE/TURN IN REQUEST)	20
E102	MAINTAIN PUBLICATION LIBRARIES	20
E103	MAINTAIN TECHNICAL ORDER (TO) FILES OR TO COMPLIANCE RECORDS	20
E96	COMPLETE CUSTODIAN REPORT LISTS (CRL)	20
A18	SCHEDULE LEAVES OR PASSES	20
A3	DETERMINE REQUIREMENTS FOR MAINTENANCE OF EQUIPMENT	20
C49	EVALUATE EXCEPTION TIME ACCOUNTING (ETA) OR MAINTENANCE DATA COLLECTION (MDC) INFORMATION	20

APPENDIX B

SELECTED REPRESENTATIVE TASKS PERFORMED BY DUTY AFSC GROUPS

TABLE B1

GROUP ID NUMBER AND TITLE: SPC007 COMBINED DAFSC 42330 AND 42350 AIRMEN

GROUP SIZE: N=1,324 PERCENT OF SAMPLE: 73%

AVERAGE GRADE: E-4 AVERAGE TICF: 38 Months

AVERAGE TAFMS: 49 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	85
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	82
K475	REMOVE OR INSTALL CONNECTOR PLUGS	80
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	80
K439	CRIMP WIRES TO SPLICES AND TERMINALS	79
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	78
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	77
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	76
K418	CLEAN CONNECTOR PLUGS	73
I239	ISOLATE MALFUNCTIONS ON AIRCRAFT AC POWER DISTRIBUTION CIRCUITS	72
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	72
I234	ISOLATE MALFUNCTIONS ON AC GENERATOR SYSTEMS	72
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	72
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL	
I290	ISOLATE MALFUNCTIONS ON LANDING GEAR CONTROL AND WARNING CIRCUITS	72
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	70
I286	ISOLATE MALFUNCTIONS ON INTERNAL LIGHTING CIRCUITS	69
I240	ISOLATE MALFUNCTIONS ON AIRCRAFT DC POWER DISTRIBUTION	69
K455	PERFORM TCTO MODIFICATIONS OF AIRCRAFT ELECTRICAL SYSTEMS	68
K455	PERFORM TCTO MODIFICATIONS OF AIRCRAFT ELECTRICAL SYSTEMS	68
H197	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	67
K401	ASSEMBLE OR DISASSEMBLE CONNECTOR PLUGS	66
I243	ISOLATE MALFUNCTIONS ON ANTI-SKID CIRCUITS	66
K458	REMOVE OR INSTALL ANTI-SKID CIRCUIT COMPONENTS	65
H194	INSPECT EXTERIOR LIGHTING CIRCUIT COMPONENTS	64
H208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	63
I271	ISOLATE MALFUNCTIONS ON EXTERNAL POWER SYSTEM CIRCUITS	63
K454	PERFORM SOLDERLESS CONNECTOR INSERTIONS OR EXTRACTIONS	63
K525	REWIRE AIRCRAFT ELECTRICAL SYSTEMS	63
G150	INSPECT ELECTRICAL SYSTEMS FOR CORROSION	60

TABLE B2

GROUP ID NUMBER AND TITLE: SPC004 DUTY AFSC 42370 Airmen

GROUP SIZE: N=487 PERCENT OF SAMPLE: 27%

AVERAGE GRADE: E-6 AVERAGE TICF: 135 Months

AVERAGE TAFMS: 154 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	77
C63	PREPARE AIRMAN PERFORMANCE REPORTS (APR)	76
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	75
B23	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	75
B40	SUPERVISE AIRCRAFT ELECTRICAL SYSTEMS SPECIALISTS (AFSC 42350)	73
G149	INSPECT AIRCRAFT ELECTRICAL SYSTEMS FOLLOWING MAINTENANCE	71
E105	MAKE ENTRIES ON AFTO FORMS 781 (AEROSPACE VEHICLE FLIGHT DATA DOCUMENT)	69
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	67
I239	ISOLATE MALFUNCTIONS ON AIRCRAFT AC POWER DISTRIBUTION CIRCUITS	67
I290	ISOLATE MALFUNCTIONS ON LANDING GEAR CONTROL AND WARNING CIRCUITS	66
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	66
D75	DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	66
I234	ISOLATE MALFUNCTIONS ON AC GENERATOR SYSTEMS	66
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	66
H208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	64
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	63
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	63
K475	REMOVE OR INSTALL CONNECTOR PLUGS	63
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	62
H197	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	62
H194	INSPECT EXTERIOR LIGHTING CIRCUIT COMPONENTS	62
K439	CRIMP WIRES TO SPLICES AND TERMINALS	61
I286	ISOLATE MALFUNCTIONS ON INTERNAL LIGHTING CIRCUITS	61
H212	INSPECT LANDING GEAR CONTROL AND WARNING CIRCUIT COMPONENTS	61
H163	INSPECT ALTERNATING CURRENT (AC) GENERATOR AND DISTRIBUTION SYSTEM CIRCUIT COMPONENTS	61
H229	INSPECT WARNING LIGHT CIRCUIT COMPONENTS	60
I243	ISOLATE MALFUNCTIONS ON ANTI-SKID CIRCUITS	60

APPENDIX C

SELECTED REPRESENTATIVE TASKS PERFORMED BY TAFMS GROUPS

TABLE C1

GROUP ID NUMBER AND TITLE: SPC010 423X0 Airmen in 1st Job (1-24 months)

GROUP SIZE: N=265 PERCENT OF SAMPLE: 15%

AVERAGE GRADE: E-3 AVERAGE TICF: 17 Months

AVERAGE TAFMS: 20 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	83
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	83
K475	REMOVE OR INSTALL CONNECTOR PLUGS	82
K439	CRIMP WIRES TO SPLICES AND TERMINALS	80
K503	REMOVE OR INSTALL PINS ON CONNECTORS PLUGS	80
K522	REPLACE FUSES, CURRENT LIMITERS,OR CIRCUIT BREAKERS	78
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	74
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	74
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	73
I234	ISOLATE MALFUNCTIONS ON AC GENERATOR SYSTEMS	71
I290	ISOLATE MALFUNCTIONS ON LANDING GEAR CONTROL AND WARNING CIRCUITS	71
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	71
I239	ISOLATE MALFUNCTIONS ON AIRCRAFT AC POWER DISTRIBUTION CIRCUITS	71
K418	CLEAN CONNECTOR PLUGS	71
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	
K458	REMOVE OR INSTALL ANTI-SKID CIRCUIT COMPONENTS	68
K455	PERFORM TCTO MODIFICATIONS OF AIRCRAFT ELECTRICAL SYSTEMS	68
K401	ASSEMBLE OR DISASSEMBLE CONNECTOR PLUGS	68
I240	ISOLATE MALFUNCTIONS ON AIRCRAFT DC POWER DISTRIBUTION	67
H197	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	66
I243	ISOLATE MALFUNCTIONS ON ANTI-SKID CIRCUITS	66
I286	ISOLATE MALFUNCTIONS ON INTERNAL LIGHTING CIRCUITS	65
K525	REWIRE AIRCRAFT ELECTRICAL SYSTEMS	65
H194	INSPECT EXTERIOR LIGHTING CIRCUIT COMPONENTS	63
H208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	62
K454	PERFORM SOLDERLESS CONNECTOR INSERTIONS OR EXTRACTIONS	62
I271	ISOLATE MALFUNCTIONS ON EXTERNAL POWER SYSTEM CIRCUITS	60
K508	REMOVE OR INSTALL RHEOSTATS	60
G150	INSPECT ELECTRICAL SYSTEMS FOR CORROSION	58
K523	REPLACE MICRO SWITCHES	56

TABLE C2

GROUP ID NUMBER AND TITLE: SPC012 423X0 Airmen in 1st Enlistment (1-48 months)

GROUP SIZE: N=821 PERCENT OF SAMPLE: 45%

AVERAGE GRADE: E-3 AVERAGE TICF: 27 Months

AVERAGE TAFMS: 30 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	85
K475	REMOVE OR INSTALL CONNECTOR PLUGS	82
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	82
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	80
K439	CRIMP WIRES TO SPLICES AND TERMINALS	80
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	78
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	78
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	77
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	74
I234	ISOLATE MALFUNCTIONS ON AC GENERATOR SYSTEMS	74
I239	ISOLATE MALFUNCTIONS ON AIRCRAFT AC POWER DISTRIBUTION CIRCUITS	74
I290	ISOLATE MALFUNCTIONS ON LANDING GEAR CONTROL AND WARNING CIRCUITS	74
K418	CLEAN CONNECTOR PLUGS	73
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	73
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	72
I240	ISOLATE MALFUNCTIONS ON AIRCRAFT DC POWER DISTRIBUTION	71
I286	ISOLATE MALFUNCTIONS ON INTERNAL LIGHTING CIRCUITS	70
K455	PERFORM TCTO MODIFICATIONS OF AIRCRAFT ELECTRICAL SYSTEMS	70
K401	ASSEMBLE OR DISASSEMBLE CONNECTOR PLUGS	70
T243	ISOLATE MALFUNCTIONS ON ANTI-SKID CIRCUITS	68
H197	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	68
K525	REWIRE AIRCRAFT ELECTRICAL SYSTEMS	67
K458	REMOVE OR INSTALL ANTI-SKID CIRCUIT COMPONENTS	67
H194	INSPECT EXTERIOR LIGHTING CIRCUIT COMPONENTS	65
H208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	65
I271	ISOLATE MALFUNCTIONS ON EXTERNAL POWER SYSTEM CIRCUITS	65
K454	PERFORM SOLDERLESS CONNECTOR INSERTIONS OR EXTRACTIONS	64
G150	INSPECT ELECTRICAL SYSTEMS FOR CORROSION	61
K523	REPLACE MICRO SWITCHES	60

TABLE C3

GROUP ID NUMBER AND TITLE: SPC013 — 423X0 Airmen in 2d Enlistment (49-96 Months)

GROUP SIZE: N=503 — PERCENT OF SAMPLE: 28%

AVERAGE GRADE: E-5 — AVERAGE TICF: 56 Months

AVERAGE TAFMS: 69 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	85
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	82
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	79
K475	REMOVE OR INSTALL CONNECTOR PLUGS	78
K439	CRIMP WIRES TO SPLICES AND TERMINALS	77
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	76
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	76
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	74
K418	CLEAN CONNECTOR PLUGS	72
I290	ISOLATE MALFUNCTIONS ON LANDING GEAR CONTROL AND WARNING CIRCUITS	72
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	71
I239	ISOLATE MALFUNCTIONS ON AIRCRAFT AC POWER DISTRIBUTION CIRCUITS	71
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	71
I234	ISOLATE MALFUNCTIONS ON AC GENERATOR SYSTEMS	69
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	68
I286	ISOLATE MALFUNCTIONS ON INTERNAL LIGHTING CIRCUITS	68
H197	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	66
I240	ISOLATE MALFUNCTIONS ON AIRCRAFT DC POWER DISTRIBUTION	65
K455	PERFORM TCTO MODIFICATIONS OF AIRCRAFT ELECTRICAL SYSTEMS	64
I271	ISOLATE MALFUNCTIONS ON EXTERNAL POWER SYSTEM CIRCUITS	63
K454	PERFORM SOLDERLESS CONNECTOR INSERTIONS OR EXTRACTIONS	62
I243	ISOLATE MALFUNCTIONS ON ANTI-SKID CIRCUITS	61
H208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	61
H194	INSPECT EXTERIOR LIGHTING CIRCUIT COMPONENTS	61
K458	REMOVE OR INSTALL ANTI-SKID CIRCUIT COMPONENTS	61
K401	ASSEMBLE OR DISASSEMBLE CONNECTOR PLUGS	60
E105	MAKE ENTRIES ON AFTO FORMS 781 (AEROSPACE VEHICLE FLIGHT) DATA DOCUMENT)	60

TABLE C4

GROUP ID NUMBER AND TITLE: SPC014 423X0 Career Airmen (97+ Months)

GROUP SIZE: N=490 PERCENT OF SAMPLE: 27%

AVERAGE GRADE: E-6 AVERAGE TICF: 137 Months

AVERAGE TAFMS: 166 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	77
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	75
C63	PREPARE AIRMAN PERFORMANCE REPORTS (APR)	75
B23	COUNSEL PERSONNEL ON PERSONAL OR MILITARY-RELATED MATTERS	73
B40	SUPERVISE AIRCRAFT ELECTRICAL SYSTEMS SPECIALISTS (AFSC 42350)	69
E105	MAKE ENTRIES ON AFTO FORMS 781 (AEROSPACE VEHICLE FLIGHT) DATA DOCUMENT)	68
G149	INSPECT AIRCRAFT ELECTRICAL SYSTEMS FOLLOWING MAINTENANCE	67
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	66
I239	ISOLATE MALFUNCTIONS ON AIRCRAFT AC POWER DISTRIBUTION CIRCUITS	66
I234	ISOLATE MALFUNCTIONS ON AC GENERATOR SYSTSEMS	65
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	65
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	63
I290	ISOLATE MALFUNCTIONS ON LANDING GEAR CONTROL AND WARNING CIRCUITS	63
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	63
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	63
H208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	63
K439	CRIMP WIRES TO SPLICES AND TERMINALS	62
D75	DEMONSTRATE HOW TO LOCATE TECHNICAL INFORMATION	62
H194	INSPECT EXTERIOR LIGHTING CIRCUIT COMPONENTS	62
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	62
K475	REMOVE OR INSTALL CONNECTOR PLUGS	61
H197	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	61
I243	ISOLATE MALFUNCTIONS ON ANTI-SKID CIRCUITS	60
I286	ISOLATE MALFUNCTIONS ON INTERNAL LIGHTING CIRCUITS	60
H229	INSPECT WARNING LIGHT CIRCUIT COMPONENTS	59
H212	INSPECT LANDING GEAR CONTROL AND WARNING CIRCUIT COMPONENTS	58
E95	COMPLETE TAGS AND LABELS	58
I240	ISOLATE MALFUNCTIONS ON AIRCRAFT DC POWER DISTRIBUTION	58
K418	CLEAN CONNECTOR PLUGS	57
E101	INVENTORY EQUIPMENT, TOOLS, OR SUPPLIES	57

APPENDIX D

SELECTED REPRESENTATIVE TASKS PERFORMED BY CONUS/OVERSEAS GROUPS

TABLE D1

GROUP ID NUMBER AND TITLE: SPC019 DUTY AFSC 42350 Airmen (CONUS)

GROUP SIZE: N=862 PERCENT OF SAMPLE: 48%

AVERAGE GRADE: E-4 AVERAGE TICF: 40 Months

AVERAGE TAFMS: 50 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	86
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	83
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	82
K439	CRIMP WIRES TO SPLICES AND TERMINALS	81
K475	REMOVE OR INSTALL CONNECTOR PLUGS	81
K522	REPLACE FUSES, CURRENT LIMITERS,OR CIRCUIT BREAKERS	80
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	79
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	78
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	76
I234	ISOLATE MALFUNCTIONS ON AC GENERATOR SYSTEMS	76
I239	ISOLATE MALFUNCTIONS ON AIRCRAFT AC POWER DISTRIBUTION CIRCUITS	76
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	75
I290	ISOLATE MALFUNCTIONS ON LANDING GEAR CONTROL AND WARNING CIRCUITS	75
K418	CLEAN CONNECTOR PLUGS	74
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	73
K455	PERFORM TCTO MODIFICATIONS OF AIRCRAFT ELECTRICAL SYSTEMS	72
I240	ISOLATE MALFUNCTIONS ON AIRCRAFT DC POWER DISTRIBUTION	72
I286	ISOLATE MALFUNCTIONS ON INTERNAL LIGHTING CIRCUITS	71
H197	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	70
K401	ASSEMBLE OR DISASSEMBLE CONNECTOR PLUGS	68
I243	ISOLATE MALFUNCTIONS ON ANTI-SKID CIRCUITS	67
K458	REMOVE OR INSTALL ANTI-SKID CIRCUIT COMPONENTS	66
K194	INSPECT EXTERIOR LIGHTING CIRCUIT COMPONENTS	66
I271	ISOLATE MALFUNCTIONS ON EXTERNAL POWER SYSTEM CIRCUITS	66
K525	REWIRE AIRCRAFT ELECTRICAL SYSTEMS	65
K208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	65
K454	PERFORM SOLDERLESS CONNECTOR INSERTIONS OR EXTRACTIONS	64
G150	INSPECT ELECTRICAL SYSTEMS FOR CORROSION	62
H212	INSPECT LANDING GEAR CONTROL AND WARNING CIRCUIT COMPONENTS	61

TABLE D2

GROUP ID NUMBER AND TITLE: SPC020 DUTY AFSC 42350 Airmen (OVERSEAS)

GROUP SIZE: N=262 PERCENT OF SAMPLE: 14%

AVERAGE GRADE: E-4 AVERAGE TICF: 48 Months

AVERAGE TAFMS: 54 Months

The following are in descending order by percent members performing:

TASKS		PERCENT MEMBERS PERFORMING
E93	COMPLETE AFTO FORMS 350 (REPARABLE ITEM PROCESSING TAG)	81
E92	COMPLETE AFTO FORMS 349 (MAINTENANCE DATA COLLECTION RECORD)	77
K475	REMOVE OR INSTALL CONNECTOR PLUGS	76
K439	CRIMP WIRES TO SPLICES AND TERMINALS	76
I269	ISOLATE MALFUNCTIONS ON EXTERIOR LIGHTING CIRCUITS	74
K503	REMOVE OR INSTALL PINS ON CONNECTOR PLUGS	73
I273	ISOLATE MALFUNCTIONS ON FIRE AND OVERHEAT DETECTION CIRCUITS	71
K522	REPLACE FUSES, CURRENT LIMITERS, OR CIRCUIT BREAKERS	71
I308	ISOLATE MALFUNCTIONS ON WARNING LIGHT CIRCUITS	70
K418	CLEAN CONNECTOR PLUGS	70
I286	ISOLATE MALFUNCTIONS ON INTERNAL LIGHTING CIRCUITS	69
I290	ISOLATE MALFUNCTIONS ON LANDING GEAR CONTROL AND WARNING CIRCUITS	68
I239	ISOLATE MALFUNCTIONS ON AIRCRAFT AC POWER DISTRIBUTION CIRCUITS	68
H185	INSPECT ELECTRICAL BONDS OR GROUNDS	66
I240	ISOLATE MALFUNCTIONS ON AIRCRAFT DC POWER DISTRIBUTION	65
I234	ISOLATE MALFUNCTIONS ON AC GENERATOR SYSTEMS	64
I243	ISOLATE MALFUNCTIONS ON ANTI-SKID CIRCUITS	63
H194	INSPECT EXTERIOR LIGHTING CIRCUIT COMPONENTS	63
K526	SOLDER WIRES TO CONNECTOR PLUGS, CONTROL BOXES, OR CONTROL PANELS	62
K455	PERFORM TCTO MODIFICATIONS OF AIRCRAFT ELECTRICAL SYSTEMS	61
H197	INSPECT FIRE AND OVERHEAT DETECTION CIRCUIT COMPONENTS	60
I271	ISOLATE MALFUNCTIONS ON EXTERNAL POWER SYSTEM CIRCUITS	60
K458	REMOVE OR INSTALL ANTI-SKID CIRCUIT COMPONENTS	60
H208	INSPECT INTERIOR LIGHTING CIRCUIT COMPONENTS	59
K487	REMOVE OR INSTALL FIRE OR OVERHEAT LOOPS	58
K401	ASSEMBLE OR DISASSEMBLE CONNECTOR PLUGS	57
K454	PERFORM SOLDERLESS CONNECTOR INSERTIONS OR EXTRACTIONS	56
E105	MAKE ENTRIES ON AFTO FORMS 781 (AEROSPACE VEHICLE FLIGHT DATA DOCUMENT)	55
H212	INSPECT LANDING GEAR CONTROL AND WARNING CIRCUIT COMPONENTS	55

END

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